PRACTICAL PHYSIOLOGY.

Lectures ON EXPERIMENTAL PHYSIOLOGY.

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LECTURE XIII.

CIRCULATION—(CONTINUED.)

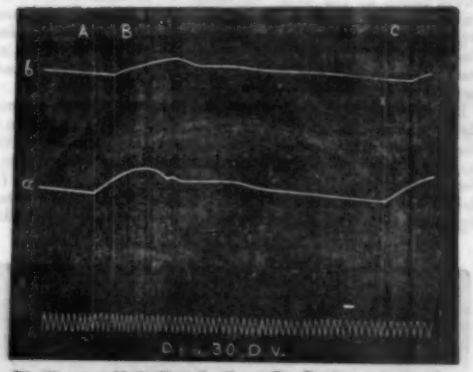
The Pulse.

GENTLEMEN,—At our last demonstration[*] we studied the blood-pressure more particularly, and we also directed our attention to various phenomena connected with the pulse. You now know, from the experiments performed by us, that the pulse is essentially a temporary distension of a blood-vessel produced by a quantity of fluid being suddenly projected into it from the heart. The artery is always filled with blood. If its wall were rigid, the heart could not project fluid into the vessel faster than it flows out: this fact you have demonstrated experimentally. But the blood-vessels being elastic, the mass of blood projected into them at intervals causes them to distend in order to accommodate the increased amount of fluid. This distension disappears as the blood escapes from the arteries. Let us rest a light lever (Fig. 64, L) on an elastic tube, through which we will pump some water. We bring the free end of the lever against a cylinder covered with smoked paper, so that the

FIG. 64.

motions of the lever may be recorded. As we imitate the heart's action, and propel fluid through the tube in an interrupted manner, the lever rises with every distension and falls with every collapse of the tube. If you place your finger on the tube and feel its pulse, you find that the lever is only rendering more evident to the eye what may be perceived by the sense of touch. If we close the exit aperture of the tube and drive fluid into the tube, the lever rises, but does not fall again, because of course the tube cannot collapse; but the moment the fluid is permitted to flow out the lever falls. You see, then, that the ascending limb of the pulse-curve indicates distension, while the descending limb indicates collapse of the tube. Let us put a second lever on the tube (L', Fig. 64). The first lever (L) rests on a part of the tube (T) which is close to the pump. We now place the second lever on the tube at a much greater distance from the pump. A piece of tubing about six feet in length intervenes between the two levers. Now we shall find out whether or not the pulse-wave is the same at every part throughout the length of the tube; and we shall also be able to measure the velocity of the pulse-wave. As its progress is rapid, we record time on the cylinder by means of a pitch-fork. We carefully arrange the points of the two levers and the writing point of the pitch-fork, so that all the three, when at rest and horizontal, will be perfectly vertical—that is to say, they all touch a vertical line which we draw upon the paper. We throw the fork into vibration, the cylinder into revolution, and we send pulse-waves at intervals through the tube. Let us examine the tracings. (Fig. 65.) You see at a glance that the pulse-curve (a) produced by the lever next the pump begins sooner than that (b) produced by the lever at a greater dis-

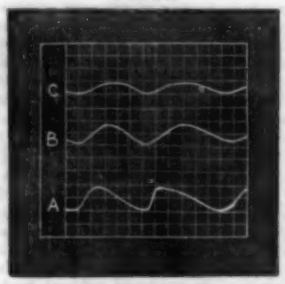
FIG. 65.



Dia. 30, D.V. 30 double vibrations of a diapason per second. a, Pulse-curve produced by the lever near pump; b, that produced by the lever far away from it.

tance from the pump. It is very easy to measure the time represented by the interval between their origins. We have only to intersect the diapason-trace and the two pulse-traces by vertical lines (A and B), and count the pitch-fork vibrations enclosed by these two vertical lines. In this case there are three and a half double vibrations (the two limbs of the letter V represent a double vibration); thirty double vibrations are equal to one second; so 30 D V : 1 sec. :: 3·5 D V : 0·1166 sec. In order to find out the velocity we must now measure the length of the tube between the two levers. In this case it is 79 inches. The wave has therefore taken 0·1166 second to travel along 79 inches of this tube. 0·1166 sec. : 79 in. :: 1 sec. : 677·7 in., or 56·4 ft. The velocity of the wave therefore is in this case 56·4 ft. per second. But you must all have noticed that when we produce waves in water—e. g., by an oar—we can make the waves go with different velocities according to the amount of force with which we start the wave. Here, in like manner, the velocity of the wave varies with the initial force with which it is projected from the heart; or, more precisely, the velocity of the pulse-wave bears a direct ratio to the force and velocity with which the pump is compressed. Of this fact you can very readily convince yourselves by experiment. That such waves take a very appreciable time to travel is a fact which might have been anticipated by anyone. Here, however, is a figure (66)

FIG. 66.



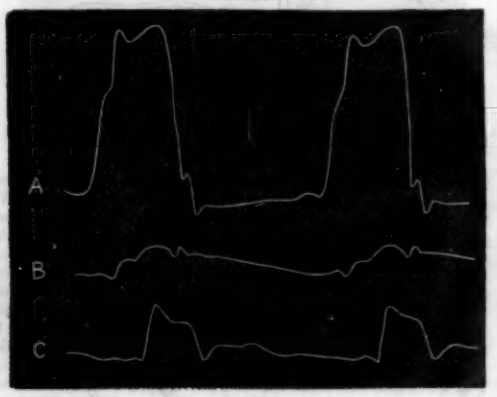
given by Marey which has misled many regarding this important point. I show it you in order that I may warn you against the snare from which even some physiological instructors seem to be unable to extricate themselves. (See Dalton's Physiology and others.) The curves in this figure are represented by Marey on squared paper in order that their relative points of origin and relative heights may be readily perceived. The curves are produced by three levers at different distances along an elastic tube. The arrangement of the whole was similar to that observed in the ex-

[*] THE LANCET, Feb. 17th, 1872.

periment which you have just witnessed. Curve A was produced by the lever nearest the pump, curve C by the lever furthest away, while B was caused by a lever in the median position. The left ends of the waves are their origins. You see that the unhappy diagram makes all the waves begin at the same moment, as is indicated by the waves all starting from the same vertical line. How Marey ever published a figure so extraordinary I cannot imagine. But in justice to him I tell you that nine years ago he retracted his error. His retractation, however, seems to have escaped many readers.

Here is an instructive figure (67), given by Chauveau and Marey, representing the transmission of the pulse-wave in the arteries of the horse. The upper line (A) indicates the motion of the left ventricle; the middle line (B) represents the pulse-waves in the aorta; while the lowest line (C) shows the pulse-waves in the femoral artery. All the tracings were recorded simultaneously. The relative duration

FIG. 67.



of the various events and the time at which they occur are indicated by this valuable drawing. You see at a glance that the pulse-wave begins to rise in the femoral distinctly after it has begun in the aorta. (Read the tracing from left to right.) The pulse-wave appears in the distal arteries later than in those near the heart. It may be observed that at different parts in the length of even a simple elastic tube the shape of the pulse-wave is not the same. Near the pump the ascending limb of the wave is much more nearly vertical than it is several feet further along the tube. (See Figs. 64, 65, 66.) The crest of the wave may be said to be "retarded" as the wave passes along the tube. What is the explanation of this? Simply that the force of the wave diminishes as it travels along the tube, and that in consequence of this diminished force the distension of the tube does not take place in the distal part of the vessel with a velocity so great as in the part of the vessel near the pump. The greater the velocity of distension the steeper, of course, is the ascending limb of the wave. When we feel the pulse with the finger, it is the crest of the wave, in other words, the greatest degree of distension of the artery, which produces the greatest sensation. The pulse at the wrist is commonly said to be one-tenth of a second behind that in the carotid. This statement is made from a comparison of the crests of the waves. I would caution you against the error of supposing that the velocity of the pulse-wave and of the blood-current mean the same thing. You have often seen waves produced by the wind or some other agent upon a stream of running water. You must have noticed that when the waves pass down the stream they go much faster than the current. This fact is rendered evident by leaves or other light things floating on the stream. They are carried along by the stream, and have a velocity almost exactly the same as the particles of water. Yet the waves easily overtake and outstrip these things. The pulse-waves and the blood-stream constitute an analogous case. The particles of blood travel through the carotid at a velocity of 10·5 inches per second (Vierordt); the pulse-wave travels at the rate of 28·5 feet per second (Weber); probably, however, the velocity of the pulse-wave is greater even than this.

The pulse-wave, as it passes along a simple elastic tube of even uniform calibre, diminishes as the distance from the pump increases. (See Figs. 64, 65, 66.) Why is this? The height of the wave must obviously much depend upon the distensibility of the tube; but the tube we have used in our experiment is equally distensible throughout its whole length. Hence the difference in the height of the waves is not to be explained by any difference in the distensibility. Perhaps you might jump to the conclusion that the pulse-wave diminishes as it travels along the tube merely because the force of the pump becomes spent: to wit—it becomes transformed into heat by friction; the mechanical motion becomes in part converted into thermal motion. But this is not the whole truth. There is a stopcock at the free end of our elastic tube. During the formation of the waves which we have just been studying the stopcock has been quite open, the fluid has been flowing freely from the tube, and there has been little resistance. Now see the effect of turning the stopcock so as to diminish the aperture of exit, and thereby increase resistance. As we increase the resistance to the exit of the fluid, the wave produced in the tube near the stopcock increases in height, and the difference in height between it and that produced in the tube near the pump grows less and less as we increase the resistance. In a tube of uniform calibre and uniform extensibility the height of the wave is the resultant of two forces—(*a*) the propelling force and (*b*) the resisting force. Both the propelling and the resisting forces are greatest in the tube at the pump; hence the wave is highest there. When, however, we have to compare the pulse-waves produced in tubes of different degrees of distensibility, we have to take into account the effect of this factor upon the height of the wave. The wall of the aorta is not nearly so distensible as that of the femoral artery; and, in consequence of this, the pulse-wave in the aorta is not so high as that in the femoral, although the former is nearer the heart. (Fig. 67.)

[The part of the lecture dealing with the further consideration of pulse tracings and of the sphygmograph is omitted, owing to lack of space, and because so much has lately been written upon these subjects. The best form of sphygmograph seems now to be Marey's, modified by Mack and Béhier. Mack has made the spring of Marey's instrument transmit its motions directly to the writing lever; and Béhier has added a simple piece of apparatus for ascertaining the amount of pressure exerted by the spring upon the artery. Dr. Sanderson has converted one of Marey's myographs into a tambour sphygmograph. He has described this instrument in his lectures (*Medical Times and Gazette*, April 29th, 1871). I have represented it as adapted to my scheme of the circulation (Fig. 70, s). Although useful for taking long tracings, it is not so well adapted for ordinary purposes as Marey's sphygmograph. Much yet requires to be done ere the value of the sphygmograph can be fully understood. It is a dangerous instrument in the hands of the unwary. The labour attending its use, and the mistakes to which it can so easily lead, seem to be the cause of its general neglect. Nevertheless, it is a useful instrument for showing pulse-irregularity, and for indicating more precisely than the finger the pressure that can be borne by the pulse. It has proved serviceable in ascertaining changes wrought in the circulation by the use of therapeutic agents.]

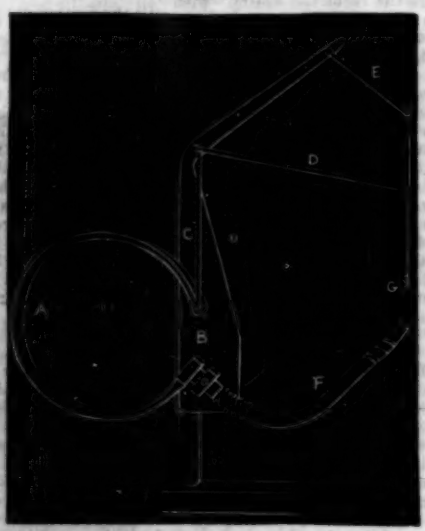
FIG. 68.

Dr. Handfield Jones has invented what appears to be really a good instrument, and one that is likely to in some measure take the place of the sphygmograph for estimating the strength of the pulse. It (Fig. 68) resembles a spiral spring letter-weigher. In place of the weighing disc, there is an ivory knob (B) fixed at the end of a steel rod (A, A'). This rod is fastened to a spiral spring. There is a steel pin (C) connected

with the rod, which pushes up a little index that points to the figure of the scale, and thus shows the amount of pressure in grammes which is applied to the ivory knob (B). In using this very simple instrument you ask the patient to place his hand in a vertical position. You feel the radial pulse close to the carpus with the forefinger of your left hand. You then take the instrument in your right hand and press its knob (B) over the radial, on the cardiac side of the point at which you are feeling the pulse. You carefully increase the pressure of the knob upon the vessel just until you cease to feel any pulsation with the finger which you have upon the pulse. You stop, and then read off the figure on the scale to which the index points. This indicates the pressure-weight in grammes which is necessary to stop the transmission of the pulse. The pressure required varies with the power of the heart. The instrument gives a more accurate indication than the finger can of the strength of the pulse.

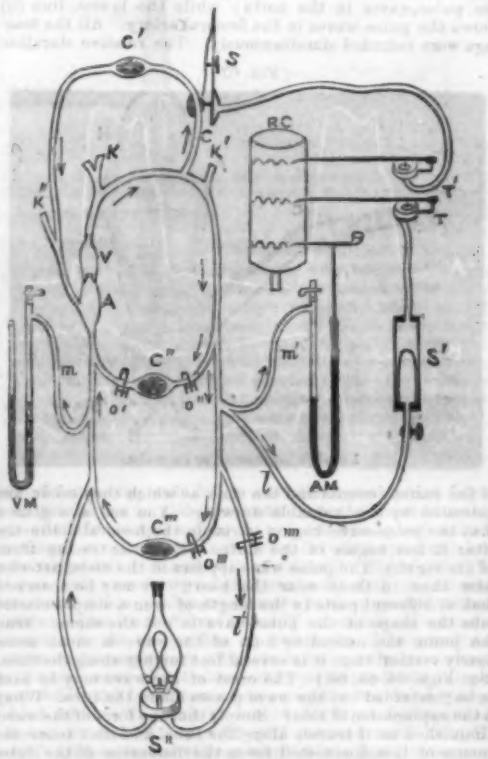
In experiments on the lower animals we sometimes want the pulse-curves. In that case we do not use the sphygmograph because it is difficult to apply it and keep it applied. In them the pulse-wave can be far more easily and accurately obtained by means of instruments placed in communication with the interior of the bloodvessel. We have seen that the mercurial hæmodynamometer gives the pulse-waves. But this instrument, though well adapted for measuring the blood-pressure, is not suited for giving us any information regarding the pulse further than its number merely. A column of a heavy fluid like mercury is not suited for the transmission of delicate movements. Fick's spring manometer or spring kymograph (Fig. 69, and Marey's sphygmoscope, Fig. 70, s′) are excellent instruments for registering the pulse-motions. Fick's instrument

FIG. 69.



consists of a hollow spring (A) filled with alcohol—a light mobile fluid. One end of the spring is open, and communicates with a tube (F) filled with a saturated solution of sodium bicarbonate. The free end of this tube is brought into communication with an artery by means of a nozzle. As the pulse-wave flies into the interior of the spring it causes it to partially unbend. Its free end (above B) rises and moves a system of levers (D, E) and vertical bars (C, G), one of which bears a pen (G) for recording the motion. Fick's instrument gives the pulse-curve admirably; but it is somewhat inconvenient to use. The blood-pressure can be ascertained by means of it, but certainly with considerable trouble. The instrument is therefore little used. Marey's sphygmoscope (s′, Fig. 70) consists of a glass tube, communicating at either end with a short leaden tube. The glass tube contains a cone of vulcanised india-rubber, so fixed that its cavity is in connexion with that of one of the leaden tubes. This tube, together with the elastic bag, are filled with a saturated solution of sodium bicarbonate. It is brought into connexion with the cavity of an artery by means of a glass nozzle and a piece of elastic tubing, all filled with soda solution. The tube at the opposite extremity of the sphygmoscope is joined to a polygraph, so that the pulse-motions may be recorded. This instrument is an excellent one, capable of giving the pulse-curve extremely well, and, moreover, it is easily used. It should be employed along with the mercurial kymograph, as I have represented in the following figure of my scheme. The mercurial kymograph registers the pressure, while the sphygmoscope gives the pulse-curve. The simplest way to use it is just to join its tube to that of the mercurial kymograph.

FIG. 70.



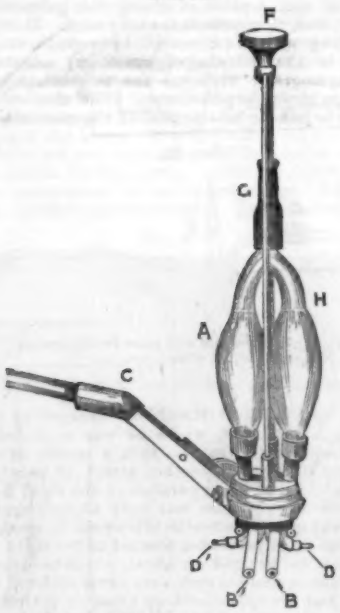
Rutherford's schema of the circulation, showing how it may be adapted for studying the use of various instruments—such as the sphygmograph (s) (Sanderson's tambour sphygmograph here shown), the sphygmoscope (s′), the stromuhr or hæmometer (s″), and the hæmodynamometer or kymograph (A M). T T′, Two polygraphs. R C, Cylinder. A, Auricle of heart. V, Ventricle. c, Carotid. c' c'' c''' Bags containing sponge representing capillaries of head, abdomen, and feet. o' o'' o''' Clamps for compressing the vessels. A M, V M, Arterial and venous manometers or hæmodynamometers. m and m′, Tubes connecting these with an artery and with a vein respectively. l, Tube for sphygmoscope. Arrows indicate the direction in which the fluid is projected when the pump is compressed. (A full description of this schema has been given in THE LANCET of Feb. 17th, 1872. The figure is reproduced here with the sphygmograph, sphygmoscope, stromuhr or hæmometer, revolving cylinder, and pen in connexion with the arterial manometer.)

The Hæmometer.

I give this name to an instrument (Fig. 71) invented by Ludwig and Dogiel, and called by them the stromuhr. The main object of the instrument is to measure the quantity of blood that flows through a vessel in a given time,—just as a gas-meter measures the quantity of gas that flows through a tube in a given time. If the calibre of the vessel and the quantity of blood which flows through it in a given time be ascertained, the velocity of the stream can be readily calculated. This instrument is therefore also a tachometer—that is, a measurer of velocity. It is the only hæmometer,

and it is the best tachometer, as yet invented. The instrument you see consists of an inverted V-shaped glass tube (G, A, H). The two oblique limbs of the V are blown into an elliptical shape. They communicate inferiorly with two

FIG. 71.



Ludwig's hæmometer, or stromuhr.

metal tubes inserted into a metal disc perforated in two places to receive them. The metal disc is articulated to a similar disc placed below it, in such a manner that the one can rotate upon the other round a vertical axis to the extent of half a circle. The lower disc has, like the upper one, two holes. Into these are inserted two bent tubes, and to each tube may be fixed a nozzle (D and D'), which is inserted into the bloodvessel. These tubes of the lower disc communicate with other two (B and B'), to which a hæmodynamometer may be attached, for the purpose of ascertaining the blood-pressure. The lower disc is immovably fixed by a pair of screw forceps and a metal rod (C), which may be supported on the head rod of Czermak's rabbit-holder (Fig. 22, THE LANCET, May 27th, 1871). Let us use the instrument, and you will now readily understand it. There are nozzles (D and D') of different sizes, so that we can select a nozzle of the same size as the bloodvessel into which we are going to insert the instrument. We expose the carotid of a chloralised rabbit, measure its breadth with a pair of compasses, and then select a nozzle as near the size as may be. We fasten these nozzles to the instrument; with a syringe we inject into the upper limb (G) of the glass bulbs defibrinated blood heated to 100° F., and let it fill the tubes at the lower part of the instrument. When it flows out by these tubes we hold their nozzles, and let the blood accumulate until it fills perfectly both tubes as high as the commencement of the glass bulbs. Now we rotate the upper part of the instrument through an angle of 30° or 40°, and leave it in this position. This cuts off the holes in the upper from those in the lower disc, and thereby prevent the escape of the blood. To simplify matters, we will dispense with the use of the hæmodynamometer for the present; so we close the openings of its tubes (B B') with wooden plugs. We next isolate the carotid, and clamp it with bullnose forceps at the upper and lower part of the neck, cut the artery across between them, and insert into either end the nozzles of the instrument. Let us put D into the cardiac end, and D' into the cranial end of the artery. We keep the clamps on the artery, for we do not at present want the blood to flow. We are not ready. We now fill the bulb A with defibrinated blood up to the line at its top, and lastly fill the bulb H, and all that remains of the cavity of the tube, with olive oil. We put a cork in the india-rubber tubing that surrounds the upper part of the glass tube G, and secure it by a ligature carefully, because the pressure of the blood will be apt to expel it, seeing that it has been so well oiled. Last of all, we put a brass handle (F) over the instrument, and fix it on two pins of the upper disc. This will enable us to rotate the upper disc readily and safely. Now you see the bulb A is full of blood, and the bulb H full of oil. We unclamp the carotid both above and below. The blood will flow in by D, and out by D', when I rotate the upper disc, so as to bring its holes into communication with those of the lower disc. I now place bulb H in connexion with tube D. You see the blood flows steadily into it. It rises in bulb H, expelling the oil from it over into bulb A, and driving the defibrinated blood out of bulb A into the cranial part of the carotid. The moment the blood reached the line at the upper end of H, we whirl round the upper disc, so that A is now brought into connexion with tube D, and H into connexion with tube D'. Now the stream runs into A, driving the oil from it, and the blood from H. This being completed, we whirl the upper disc round again, so as to reverse the operation, and so on. The two bulbs have an equal capacity; we only require to know this capacity, and the time which the blood takes to fill the bulb, in order to ascertain how much blood flows through the carotid in a given time. How shall we best measure the time which the blood takes to fill the bulb? We take a registering apparatus with continuous paper (Fig. 29, Nov. 11th, 1871), and record time upon it with a metronome apparatus (to be afterwards described), and we cause the hæmometer to trace a horizontal line upon the paper, and to make a vertical stroke at each turn of the upper disc. (This is done by bringing it into connexion with an electro-magnetic apparatus. The description is omitted, however, until the figure of the metronome apparatus alluded to above is published.)

The amount of blood going to most parts varies from time to time, the variation chiefly depending upon the contraction of the small arteries of the part—e.g., when food is introduced into the stomach its bloodvessels dilate and permit of the passage of much more blood through the viscus. Also in the kidney the amount of blood which passes through it varies much. The hæmometer enables us to measure the quantity of blood and its variations in such cases. On this account the instrument is a very valuable one, and will doubtless be much employed for ascertaining the action of drugs, &c., upon the circulation in various parts. (This is the instrument referred to in an account of some researches by Dogiel in THE LANCET of February 10th, 1872.)

Velocity of the Blood.

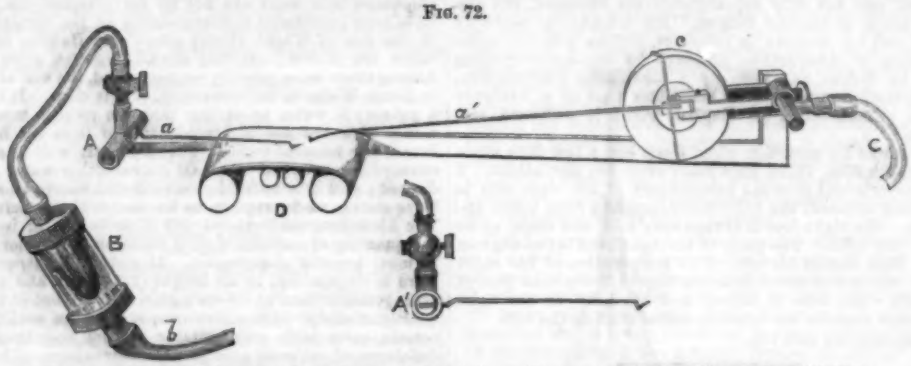
Various instruments have been invented with a view to ascertain the velocity of the blood, and the changes which it undergoes in the arteries and veins. It is worth while that I mention Chauveau and Lortet's tachometer (A, A', Fig. 72), on account of the principle alluded to in its construction. It consists of a metal tube (A) having a hole in its side. The hole is closed by a piece of vulcanised india-rubber, in which a thin plate of aluminium (a) is inserted. The inner end of this plate projects across the interior of the vessel, while its outer end is prolonged as a thin rod, bent at its end into the form of a pen, which records the motions of the bar upon a revolving cylinder. An artery is divided and the metal tube fixed into the vessel. As the blood-stream traverses the tube it causes the metal tongue to deviate from its rectangular position, the amount of the deviation bearing a direct ratio to the velocity of the stream. The deviations of the tachometer-pen may be compared with the pressure by connecting a sphygmoscope (B) with the tachometer-tube. The sphygmoscope is connected with a polygraph (C) which records its motions upon the same cylinder (D). This instrument can only be used in a large animal, such as a horse, and therefore it is not one which is nearly so serviceable as the hæmometer above described.

Ludwig's hæmometer enables us to ascertain not only the quantity of blood which flows through a vessel in a given time, but also the velocity. It is the best instrument for showing deviations in velocity which extend over a few seconds.

Unlike Chauveau and Lortet's instrument, it cannot show deviations which last for only one or two seconds. But Lortet's instrument can only be used with an animal such as a horse, and its results are even then not always reliable, while the hæmometer can be used with dogs, rabbits, &c.

[The foregoing observations on velocity are shortened owing to the length of this lecture.]

FIG. 72.



Chauveau and Lortet's tachometer or hæmo-dromometer (A and A'). *a*, Its pen. D. Cylinders with paper for registration. B, Sphygmoscope. [*b*, Its tube, supposed to be joined to *a*. *c*, Polygraph. *a'*, Its writing-pen.

CASE OF SYPHILITIC DISEASE OF THE BRAIN:

COMPLETE PARALYSIS OF RIGHT ARM; PARTIAL PARALYSIS OF RIGHT LEG; APHASIA.

BY J. LOCKHART CLARKE, M.D., F.R.S.

H. H——, a builder, aged forty-seven, contracted syphilis nineteen years ago. Two years later he had a large syphilitic ulcer on the right leg. Ever since he suffered at various intervals from periostitis of the legs, sternum, shoulders, and especially of the right brow, which was frequently swollen and tender to the touch. These symptoms were soon removed by iodide of potassium, in doses of from five to eight grains; and, as he was somewhat cachectic and weak, I prescribed at the same time some citrate of iron and quinine.

During the last two years he had great anxiety of mind arising from losses in business, and frequently indulged to excess in the use of spirits.

On Feb. 14th, 1863, he had sudden but only partial loss of power in the right arm and leg, and fell to the ground. On protruding his tongue it pointed to the right, while the face was drawn to the opposite side. The attack was preceded for some hours by occasional inability to complete the pronunciation of a word or to articulate all its syllables. The right hand and wrist were much swollen. There was partial ptosis of the left eyelid, and a dull, stupid expression of the countenance.

On the following day, when I saw him with his local medical attendant, he had taken some ammonia, some calomel, and an aperient. He was ordered to have his feet in a hot mustard-bath, to have a blister behind the left ear, and to take ten grains of iodide of potassium every four hours.

Feb. 16th.—Somewhat improved; can move the right arm a little better; can walk across the room alone, but drags the right leg.

17th.—Much improved; can lift his right arm and shake hands; wrist and hand less swollen; tongue projected less to the right side. Ptosis of left eyelid has almost disappeared; power of articulation improved.

18th.—Continues to improve. Can lift his right arm briskly; swelling of wrist and hand nearly gone; ptosis entirely gone; face perfectly straight; walks perfectly with right leg; only some hesitation in speech.

20th.—Continued improvement; has walked round the garden.

Two days after he went to Brighton apparently well, and in good spirits. While there he took citrate of iron and quinine, with smaller doses of iodide of potassium.

In the first week of March he returned to London to appear in a law court, where he was subjected to great mental excitement. On the 13th, a month after he was first taken ill, he had another attack of paralysis. The right arm was completely paralysed; the right leg was not much affected. The face was only slightly drawn to the left, but was more so when he attempted to speak or laugh. The tongue when protruded pointed to the right. He was quite conscious, but had an idiotic or imbecile expression of countenance, and his eyes were never directed to any one spot, but had the appearance of those of a drunken man. The conjunctivæ were finely injected, but not particularly red. The pupils were of moderate size. There was partial ptosis of the left eyelid. The skin of the face and body had a yellowish tint. Pulse moderate, but fuller and stronger on the affected side.

These symptoms were preceded for a few days by occasional pain and sensation of pressure on the vertex of the head. He was ordered eight grains of iodide of potassium, and five grains of bicarbonate of potash, in decoction of sarsaparilla, every four hours; and a pill composed of one grain of subchloride of mercury and four grains of extract of hyoscyamus, every six hours.

March 14th.—Expression of eyes and countenance improved; slight ptosis continues; right arm quite useless; when spoken to or questioned upon any subject, answers nothing but "No;" has passed three copious and offensive evacuations; is unable to protrude the tongue. Ordered a blister to the nape of the neck.

16th.—Expression of countenance and eyes decidedly improved. After much persuasion to speak, he articulated "Yes," and, with some difficulty, "I can't." Right arm still useless.

17th.—Continues to improve; articulates better; can protrude the tongue a little, and just move the right arm as it lies in bed; skin still tinged with yellow; has passed three copious and offensive evacuations.

20th.—About the same; gums affected by the mercury, with slight flow of saliva; right arm still useless. To omit the pills, but continue with the iodide of potassium.

24th.—Decidedly improved; can articulate several words in succession, and more distinctly.

April 6th.—General health excellent, and appetite keen; walks and drives out; but right arm still powerless, and no improvement in the power of articulation.

15th.—On waking in the morning he found that he could lift his right arm, and move it about slightly.

From this time he continued to improve. The right arm became stronger every day, although the elbow-joint was contracted and stiff. The improvement in the power of articulation was slower, and, curiously enough, after getting out a few words with difficulty and hesitation, he was immediately and irresistibly impelled to utter rapidly and quite distinctly the three words, "go to bed." By the use

of electricity the contraction of the elbow-joint was much reduced.

For the last six years his health has been perfect. He is stouter and much more robust than he was before his illness, and not only superintends his business, but can walk for miles without fatigue. His intellect is perfectly clear, and his memory is excellent, but he has still some difficulty of articulation, although he can say everything that he desires and keep up a continuous conversation. His articulation very much resembles that of a foreigner whose pronunciation of English words is awkward and difficult.

Such was his condition when I saw him a few days since (on March 30th, 1872), nine years after his first attack. I then ascertained that the temperature of his right side is variously reduced, the reduction decreasing from below upwards. His right foot is always very cold, and often, as he says, "icy cold." The palm of his right hand is two degrees lower than that of his left. The temperature of his right axilla was rather more than one degree lower than that of the left. The lobe of his ear and his head on the right side were slightly but sensibly colder than on the left.

Harley-street, W., April, 1872.

NOTES OF VISITS TO FOREIGN BATHS.

By JOHN MACPHERSON, M.A., M.D.

IV.—SOME NORTH GERMAN BATHS.

In a very picturesque situation in the Thuringian forest, one thousand feet above the level of the sea, after a pleasant drive from Eisenach, I came on Liebenstein, which, of the smaller baths that I have visited, appears to be one of the most prosperous, if I may judge by the new hotels and handsome lodging-houses springing up with great rapidity. It possesses a strong chalybeate well, containing, along with an abundant supply of carbonic acid, nearly ·6 of a grain of carbonate of iron, and about 9 grs. of earthy salts in 16 oz. It is therefore a fairly pure chalybeate. It is sparkling, and has a pleasant, half-astringent taste. Here, too, are to be had salt baths, the water being conveyed from Saltzungen. It is a favourite station for the whey cure. There is also a hydropathic establishment. I think improvements might be made about the drinking-well, and the baths appeared to be by no means in good order; but altogether, taking into consideration the beauty of the neighbouring scenery, this is one of the pleasantest of the minor baths in Northern Germany; and, if its popularity goes on increasing, more will be done to improve the establishments. There are rocks and caves, woods, and ruined castles in the neighbourhood, besides the beautiful grounds of Schloss-Altenstein. Altogether, there is much to make Liebenstein a desirable place for English families who are not in search of excitement. Besides having an excellent chalybeate to drink, they have various other appliances for the restoration of health offered to them.

A few miles from Liebenstein is a small well-managed bath—that of Saltzungen,—with salt springs and *gradir* houses. It is employed in the same way as similar salt springs, and the steel waters of Liebenstein and the salt-water bathing of Saltzungen supplement each other very conveniently, as the two sets of springs at Pyrmont do.

On the way back from Liebenstein to Eisenach, one descends through the narrow picturesque valley of Ruhla, with its long straggling village. Besides a weak iron spring, it boasts of a hydropathic establishment and of baths of extract of pine. Here you may have deep repose in a half-Alpine pastoral valley. Eisenach also has artificial baths.

Kosen, not very far from Weimar, lying in the open Saal valley, possesses a *soolbad* or salt bath, and an iron spring. The place is well managed, and one of considerable resort to the northern Germans. I did not visit it.

I regretted much not being able to reach the romantic bath of Alexisbad in the Selke valley in the lower Hartz, both because it is a very popular bath, and because it contains the Selke well, which, like the Muspratt well at Harrogate, is supposed to contain nearly 1 grain of chloride and ·3 of sulphate of iron. Indeed, the latest analysis confirms the anomalous fact of the presence of chloride of iron. This water is only used for bathing.

We are very slow to learn in England that the strong sulphated iron wells are not fit for internal use. Many have been introduced to notice—such as the Sandrock one in the Isle of Wight, Horley-green near Halifax, Shadwell below the Tower; but they are all forgotten after a time. Among those more recently recommended, the well of Trewif in North Wales is, unfortunately, of this class. It is really a poison: a water so strong that the patient must commence with the use of teaspoonsful of it is not fit to be drunk as a mineral water. The Muspratt well is also too strong for convenient use. Of course either water may be diluted; still it is desirable that mineral waters should not be so strong as to require to be used with excessive care. The Alexisbrunnen contains ·403 of carbonate of iron; but the quantity of carbonic acid it contains is inferior to that in most popular chalybeates. Alexisbad, I suspect, owes more to its position, to its height (1350 feet), and its good arrangements than to its springs, which are not of the best quality of chalybeates. However, it has been said that, in certain cases with over-irritable mucous membranes, the deficiency of carbonic acid is no disadvantage. There are pine extract baths to be had here, and there is also a hydropathic establishment.

The next bath that I visited is in the dominions of the Prince of Waldeck, and is nearer Cassel than any other large city. The virtues of its waters are derived mainly from small quantities of alkalies and a little iron, of carbonates of soda, magnesia, and lime, with an abundant supply of carbonic acid. It may be remembered that waters containing lime have often enjoyed repute in calculous affections, although the theory of the action of lime in such cases, except as a feeble antacid, has always been obscure.

Wildungen enjoys a special repute in affections of the urinary organs. It is one of the old baths that still possess a gambling-table. It offers considerable natural beauties, has pleasant airy downs with green sward, such as I have seldom met with out of England, and its waters are delicious. Unfortunately, the wells are a good deal scattered; but not more so than at Spa, which has remained so steady a favourite with the public. There is more than one comfortable hotel. The situation of the kurhaus is rather too low. The Stadtbrunnen, at the end of a fine avenue near the kurhaus, consists essentially of 6 grains of carbonate of lime, 4 of magnesia, and ·16 of iron. The Salzbrunnen, twenty minutes' walk distant, is much more alkaline, containing 6¼ grains of carbonate of soda, 10 of carbonate of magnesia, and nearly as much of carbonate of lime, with 8 grains of common salt, and 0·14 of carbonate of iron. The Stahlbrunnen, at nearly the same distance, lying in a very picturesque wooded ravine, is in rather a neglected state. It is an extremely pure iron spring, containing nearly ·6 grain of iron. There are various other springs of less importance. The waters of the Stadt and of the Bade brunnen are employed for the baths, which are artificially heated here, as in other places. The water of the Stadtbrunnen is very largely exported.

Wildungen is not so much visited for its virtues as a steel bath, as for catarrhs of the bladder and kidneys; and it is the Salzbrunnen, with its supply of alkalies, which is evidently most useful for this purpose, although it is the Stadtbrunnen that is practically the most employed. Pleasant though these waters are, and useful though their continued use may be, they cannot be expected to do as much in gravel as more alkaline waters, or as some, like those of Carlsbad, having more action on the alimentary canal. Salzbrunnen strongly resembles the Kellerbrunnen in the Brohl valley, and is in iron not quite so strong as the Heilbrunnen in the same place, to which allusion has been already made. Although the repute of Wildungen in a special set of cases may be only factitious and temporary, I know no chalybeate that presents wells of various strengths in more agreeable forms, and it ought to be popular as an iron bath. Owing to its special reputation Wildungen is often visited by patients from very distant quarters of the world. I only saw two English families there. The number of doctors, no less than six, shows that the place must be in favour. Most pleasant though the waters of Wildungen undoubtedly are, it is only fair to say that various patients who were there for special treatment were rather disappointed at the

result, and hoped that the beneficial effects of the water would be developed after a change of place, and resort to Engelberg, or some of the higher stations in Switzerland. If less of a specialty were made of the Wildungen waters, I think that a place with such excellent chalybeate waters would be more resorted to for general anæmic conditions. Wildungen is three hours' drive from Wabern, the nearest railway station.

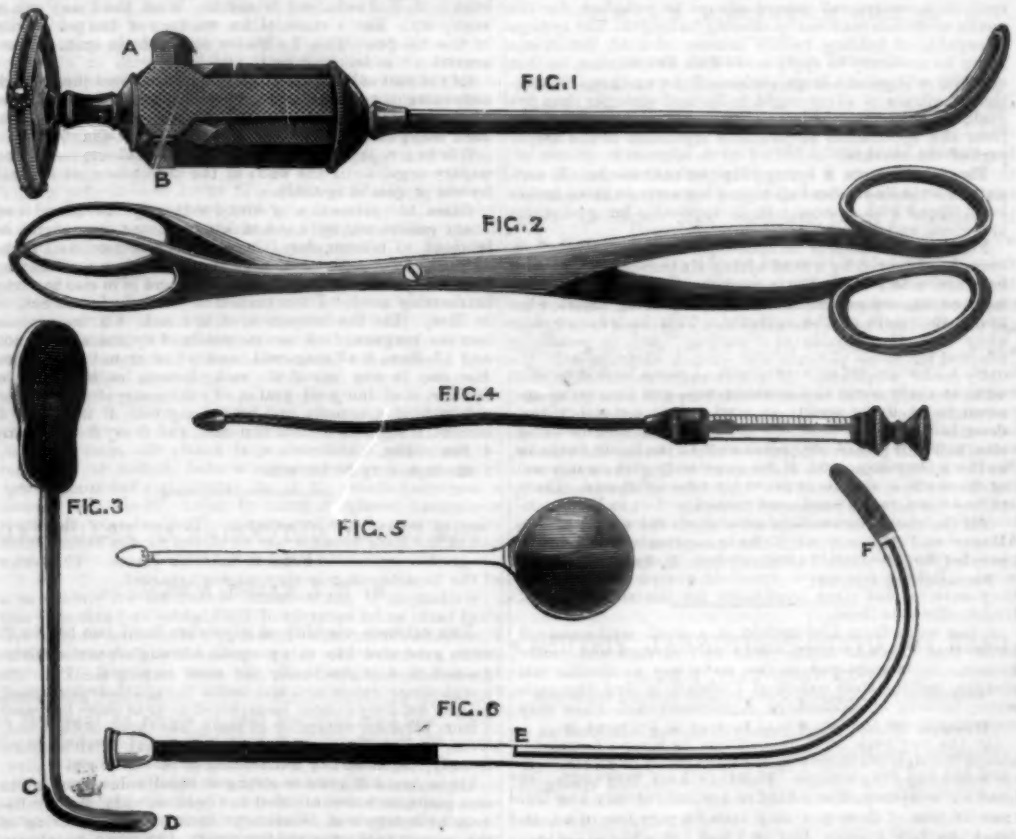
SOME IMPROVED SURGICAL INSTRUMENTS.

BY W. F. TEEVAN, B.A., F.R.C.S.,

SURGEON TO THE WEST LONDON HOSPITAL; SURGEON TO ST. PETER'S HOSPITAL, AND LATE LECTURER ON ANATOMY AT THE WESTMINSTER HOSPITAL.

FIG. 1 represents a lithotrite of different construction to any in use. Having tried variously shaped lithotrites, I found that the small square handle of Civiale's instrument possessed certain advantages which were, I considered, capable of being still further utilised. Accordingly I had my lithotrite made with a heavy octagonal handle. The sliding movement is converted into the screw action by the simple pressure of the thumb on the vertical slide A, which causes it to descend and project as much at B as it did at A. If pressure be applied at B the slide will ascend and the blades be no longer fixed. The advantages possessed by a lithotrite of the construction I have described are—1. The flat surfaces of the handle enable the fingers to rest steadily and lightly on them, and thus permit the greatest delicacy and accuracy in manipulation, whilst the angularity of the octagonal handle imparts a firmness to the grasp unattainable in other instruments. 2. The heaviness of the handle enables the lithotrite to glide into the bladder more easily than one possessing a lighter handle; it simply requires, not pressure, but only guidance. 3. Vertical pressure on the slide is the one only action which causes the minimum amount of movement of the lithotrite, and is consequently the least disagreeable to the patient.

Fig. 2 represents the forceps I use for extracting a stone in the adult. It is an open polypus forceps of very slight construction, with fenestrated blades serrated on the inside. It will never let a stone slip, and its circumference, plus the stone, only equals that of the latter. In a prolonged operation the ordinary lithotomy forceps is very liable to let the stone slip if the surgeon desires to change hands or give it to an assistant whilst he enlarges the wound. Not so with the forceps I have described, for if the grasp on the handles be relaxed it will still firmly hold the calculus,



as its blades are flexible to a considerable extent. I would here remark that the best way of using the forceps is that advocated by Mr. Coulson as follows:—When the forceps has been introduced into the bladder the blades ought to be quickly and forcibly expanded, and then slowly closed, when the stone will be found to have fallen into the grasp of the instrument. Any attempt to grope about the bladder for the stone, or to nibble at it with the forceps, when felt, will only tend to prolong the operation. I have never found Mr. Coulson's manœuvre fail. In children I do not use a forceps, but extract the calculus with the left forefinger.

Fig. 3 represents my rectangular staff. It differs considerably from Dr. Buchanan's well-known instrument. The handle is twice as large as is usually made, the shaft is shorter, and the horizontal part scarcely forms with the shaft a right angle. The groove is peculiar, inasmuch as it is continued upwards at C for half an inch on the vertical

part, whilst the other end of the groove terminates half an inch from D in an acute angle. Lastly, the groove is not so much lateralised as in Dr. Buchanan's staff, but occupies much the same position as in the ordinary curved staff. The advantages of my staff are that the large handle allows a firm grasp, so that the surgeon can drive his knife boldly along the groove without the instrument quivering under the pressure, as is often seen. In Dr. Buchanan's instrument it is not always easy to get the knife into the groove, for, if it strike the cylindrical vertical shaft, it will glide off; but as in my instrument the groove is continued upwards for half an inch, the surgeon will find no difficulty in getting into it at the first essay. The most important point connected with a staff is the termination of the groove near D. If it end in an obtuse angle, or even a right angle, there is always the danger of the knife travelling on, and piercing the posterior wall of the bladder, as happened twice to a London hospital surgeon with fatal results from peritonitis. Now with my staff such a misfortune is not possible, as the point of the knife becomes locked in the acute angle, and so arrested in its progress.

Fig. 4 is a glass syringe with an elastic nozzle, six inches long, graduated, and surmounted with a cone, for applying injections to the deeper part of the urethra. It is very undesirable to use a metallic nozzle, as it is not only painful but injurious. The cone enables us to know with certainty when we have arrived at the veru montanum, or diseased spot, as measurement cannot always be relied on, for the penile urethra is continually altering its length. The syringe is capable of holding twenty minims of fluid, but it can never be necessary to apply more than five minims, as that quantity will paint a large surface of the urethra. No solution of nitrate of silver ought to be used stronger than five grains to the ounce. I have seen disastrous results ensue from the application of powerful injections to the deeper part of the urethra.

Fig. 5 represents a syringe for patients to use. It consists of an india-rubber ball with a bone nozzle three inches long, tipped with a cone. It is applicable for gonorrhœa and gleet, and is durable and inexpensive.

Fig. 6 is the section of an elastic prostatic catheter, whose curve is preserved by a steel spring six inches long, extending from E to F along the concavity of the interior of the instrument, and preserved from rust by being inserted between the coats of the catheter. This instrument does away with the trouble of "setting," and is peculiarly adapted for those patients who cannot dispense with the daily use of a catheter. If a soft catheter cannot be used without a stiff stylet to preserve its curve, it loses its special advantages over a metal one. Now, the catheter I have described, although perfectly pliant and capable of extension, will still preserve its curve whilst entering the bladder, as the spring causes the instrument to hug the upper wall of the urethra, and avoid the third lobe of the prostate by tilting the point upwards and forwards.

All the above instruments were made for me by Messrs. Mayer and Meltzer, with the exception of the elastic nozzle (Fig. 4), which I obtained from M. Lasserre.

Portman-square, April, 1872.

CASE OF UTERO-PERITONEAL FISTULA.*

BY LAWSON TAIT, F.R.C.S.,

SURGEON TO THE BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.

HANNAH W——, aged twenty-four, was admitted as an out-patient on March 4th. She was married at eighteen, and has had five children, the last only six weeks ago. She had no assistance of any kind at her last labour; has little recollection of it save that it lasted a very long time, and that she lost a great deal of blood. She has never since been free from loss. She presented on admission a most anæmic, worn-out, and wretched appearance. Uterus large; felt easily above the pubes; cervix spongy and easily admitted the point of the finger; cavity admitted the sound nearly six inches. Ordered three grains of the citrate of quinine and iron to be taken in a mixture thrice daily, along with a pill containing a grain of ergotin.

March 8th.—The discharge has ceased; uterine cavity still six inches, but the tumour feels less externally.

April 1st.—Uterine cavity four inches, and the tumour much diminished. Ordered five grains of the iodide and twenty of the bromide of potassium, to be taken three times daily, along with five grains of the saccharated carbonate of iron in pill.

8th.—Uterine cavity three inches; but after reaching this distance the sound slipped, without the exercise of any force, through the fundus, apparently about midway between the cornua and somewhat on the anterior aspect, and could readily be felt under the abdominal parietes. The woman is so thin that the position of the exit of the sound can readily be felt. On this day I passed the sound twice, and each time found that it only required a little manœuvring to pass it at the one spot.

On the Saturday previous (13th) I had passed the sound through the fundus in presence of my colleagues, Dr. Savage and Mr. Bracey, and on the 22nd again before Mr. Creagh and Mr. Berry, satisfying them all as to the fact of the perforation, the patient never seeming in any way the worse of the operation, or to suffer any pain in its performance. She has improved in general health in a very marked degree since she has been under treatment.

On April 24th, as I wished to bring the case under the notice of the Midland Medical Society, and as it was evidently inconvenient and unadvisable to publicly exhibit such a case, I asked my friend Mr. West, the President, to verify with me in consultation the fact of the perforation of the fundus. This he kindly did, and our united representation was accepted by the Society.

Of the fact of the perforation there can be no question; it only remains to explain it. That there is a fistula I have no doubt, though it may be difficult to persuade many that such is the case. I am also under the belief that it had its origin in a rupture of the uterus during labour, remaining undiscovered until the walls of the uterus became thinned by the process of involution.

Cases of perforation of the fundus by the sound are, I am convinced, by no means so rare as one would be inclined to believe, for I have seen at least five or six, and Sir James Simpson used to speak to us of having seen many. They are very curious, and give rise to many interesting subjects for consideration. For instance, is it likely that the subject of this fistula will ever again become pregnant? I see no reason why she should not, and I believe the fistula will remain patent until she does. Her case is also one of the many lessons leading us to be less afraid of the peritoneal cavity than surgeons, from the old traditions, usually are; and if my view of its origin is correct, it is an additional instance of recovery from rupture of the uterus.

Birmingham, April 25th, 1872.

* Read before the Midland Medical Society.

THE USE OF GLYCERINE IN PRACTICAL PHARMACY.

BY W. J. MARSH, M.R.C.S., &c.

THE extreme viscidity of glycerine itself is a bar to its more extensive use as an emollient, and also as a solvent for certain medicinal salts and other materia medica. The following preparations are elegant, convenient, and permanent; and I am surprised that so simple an expedient as mere dilution should have been hitherto overlooked, or not formally expressed, by our leading pharmaceutists.

Glycerinum dilutum consists of equal volumes of glycerine and distilled water, shaken together. This preparation may be briefly but accurately described as possessing all the advantages of glycerine itself, without its paramount disadvantage, extreme viscidity.

Solut. Chloral. (℈j. in ʒj.) consists of 960 grains of hydrate of chloral, coarsely powdered, dissolved in dilute glycerine to ʒvj.

Solut. Ferri (℈j. in ʒj.) may be similarly prepared, with the ammonio-citrate salt.

Solut. Ferri et Quinæ (ʒj. in ʒj.) is prepared by dissolving 480 grains of citrate of iron and quinine in dilute glycerine to ʒviij.

Solut. Tannin. (℥j. in ℥j.) may be similarly prepared.

Solut. Ferri Iodid. (gr. iij. in ℥j.): recently prepared iodide of iron, 240 grains; dilute glycerine to ℥x.

Liquor Aloes: socotrine aloes, coarsely powdered, 240 gr.; dilute glycerine to ℥x. Macerate for a week, with frequent and prolonged agitation, till the aloes is thoroughly disintegrated and no longer adheres to the bottom of the bottle. Clarify by spontaneous subsidence. Decant the clear liquor, and repeat the process of clarification with the turbid residue, in narrow phials or tubes, as far as practicable. ℥j. of this preparation represents the *pure gum* (identical with the officinal cold-water "extract") contained in 3 grains of the crude aloes; and the preparation is less costly than a direct solution of the "extract" of pure gum.

Liquor Opii may be similarly prepared.

Littlemore, April, 1872.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF STRANGULATED INGUINAL HERNIA IN A CHILD SIX WEEKS OLD; OPERATION; RECOVERY; SUBSEQUENT DEATH FROM IDIOPATHIC PLEURISY AND PERITONITIS.

(Under the care of Mr. ERICHSEN.)

For the notes of the following case we are indebted to Mr. H. J. Benham, house-surgeon.

A child, weak and sickly-looking, suffering from congenital syphilis, with spots of psoriasis on the buttocks, had been under treatment for a fortnight for sickness and vomiting. This was relieved by Sunday, March 17th. On Monday, at 10 o'clock, the mother noticed a swelling in the right scrotum. On Tuesday morning the vomiting recommenced, and continued till admission on Wednesday, at 4.30 P.M. The vomited matter was stercoraceous, and there was no passage from the bowels. On Wednesday morning the child had a convulsive fit.

On admission, the child was frequently convulsed; hands tightly clenched; face much pinched and anxious; abdomen distended and tympanitic; veins over the anterior surface of the body much engorged and prominent; tongue dry and brown. In the right scrotum there was a tense cylindrical tumour, traceable to the external ring. There was no impulse when the child cried, and the impulse upwards ceased at the external ring, though the neck of the hernia could be traced to the inner ring. The testicle could with some difficulty be distinguished lying close to and behind the lower end of the tumour. The scrotum was only slightly reddened.

At 4.45 P.M. the child was placed in a hot bath, and the taxis performed by the house-surgeon, without any result. Chloroform was then administered, and the taxis continued. After some time a slight gurgling was felt. The tumour slowly diminished in size; but at 5.30 it still remained tense, and the strangulation was evidently unrelieved, though the tension was less, and the child appeared somewhat better. The taxis was therefore discontinued. The child was then wrapped in a blanket, and some brandy and milk administered. Stercoraceous vomiting recurred at intervals.

At 8 P.M. the child was again placed under chloroform, and Mr. Erichsen proceeded to operate. An incision one inch and a half long was made over the axis of the tumour, beginning a little above Poupart's ligament. By a little cautious dissection a small portion of the sac was exposed, and the fat and fascia divided on a director to the same extent as the skin. Some fibres of the external oblique were then divided, without relieving the strangulation. The sac was therefore opened, and the tight constriction at its neck divided, when the bowel slipped back easily. A comparatively large quantity of sanguineous fluid escaped from the sac. The bowel was congested, but not deeply. The testicle could not be seen in the sac. The integuments were brought together by three silver-wire sutures, and the descent of the hernia prevented by narrow strips of strapping crossing the wound obliquely. Before removal from the table the child passed a liquid and offensive motion. Milk-and-water and brandy were administered.

There was no return of the vomiting during the night; the child took the breast well, but was restless. Three offensive motions were passed during the night.

Early in the morning the child appeared to suffer much from pain in the abdomen. Two minims of the solution of morphia (B.P.) were given in a little water, and it soon dropped off to sleep. At 11 A.M. the pulse was good; breathing rather shallow; abdomen less tumid; veins not visible; child convulsed occasionally; eyeballs dull, turned upwards and outwards, and the pupils strongly contracted; limbs somewhat rigid. The child was easily roused by a touch or a sound. At 2 P.M. the breathing was very shallow and chiefly thoracic, but pulse still good; eyeballs still more rotated outwards; head moving rapidly from side to side; tongue vibrating; abdomen swollen and hard; veins very apparent; legs drawn up and rigid. At 7 P.M. the little patient appeared better; tongue clean and moist; abdomen softer; veins less visible; strabismus less; pupils still contracted; had revived a little and cried now and then. The hernia had not come down; strapping reapplied; bowels open twice during the day.

On Friday morning the child looked very much better, and took the breast well. Abdomen supple; breathing abdominal. He began to snuffle occasionally, having previously breathed chiefly through the mouth. A grain of grey powder was ordered to be taken three times a day. The wound to be dressed lightly.

From this time the child rapidly improved in appearance from day to day. The wound gaped, owing to the difficulty of controlling the child's movements, and became surrounded by a considerable amount of inflammatory œdema, extending into the groin and to the penis and scrotum. This, however, disappeared in a day or two under hot fomentations, and the wound assumed a more healthy appearance. It was dressed with red wash, and the edges approximated as well as possible by strapping. The child still steadily improved. The wound slowly healed by granulation, and, having become quite superficial, the child was made an out-patient on the 12th April. The psoriasis had faded, and the café-au-lait tint of the skin had in great measure disappeared.

On April 15th the mother brought the child, stating that it was not so well; but it seemed in its usual health. Its abdomen was not swollen, but there was a commencing umbilical hernia. A pad and bandage were applied.

On April 18th the mother brought word that the child had died. The symptoms pointed to peritonitis.

Autopsy.—The peritoneum and the right pleura were full of turbid serum with flaky lymph. There was collapse of lung, but no pneumonia. The hernial sac was contracted, and the incision in it quite healed. There was no injection of the peritoneum in or near it. No cause could be found for the peritonitis and pleurisy, and it was therefore inferred to be due to cold. The recovery from the operation was complete, only a skin wound remaining. The right testicle was found in the sac, much atrophied.

SEAMEN'S HOSPITAL, GREENWICH.

SUPPOSED HEPATIC ABSCESS DISCHARGING THROUGH THE LUNG.

(Under the care of DR. STEPHEN H. WARD.)

T. B——, aged fifty-six, first admitted December 4th, 1871, with a history of dysentery that had occurred some nine months previously. Six weeks before entry he had been spitting up a large quantity of blood intimately mixed with some thick viscid material. General symptoms: cough at intervals; continual expectoration of a rusty-coloured sputum, of an eminently brick-dust character; heart sounds healthy; urine normal; bowels regular; no dyspnœa,

no genuine hæmoptysis; puerile respiration over left lung, before and behind; dulness on percussion under right clavicle; moist crepitation in front over middle third of right lung; some dulness over the same lung behind, with impaired inspiration and expiration. He was treated with bark, cod-liver oil, and meat diet. The quantity of sputum decreased from thirty ounces to about half an ounce in the twenty-four hours. The patient gained flesh, and was discharged relieved on January 12th.

He was readmitted on February 5th, when the following further history of the case was compiled by Mr. Adam Young, house-physician:—Last summer he had dysentery, of which he gradually got well. In November he began to be troubled with a cough. One day he felt great pain in the pit of the stomach and between the shoulder-blades; he had been exerting himself a good deal the day before in hauling about sails, &c. Soon afterwards, during the night, he felt a salt taste in his mouth, and on getting a light he found he was spitting blood, "heaving it up in great mouthfuls," about a pint altogether; in colour bright red. His complexion is somewhat sallow; says he has not lost much flesh since the commencement of his illness; at present he is fairly nourished; tongue pale, covered slightly with a yellow fur; bowels opened regularly once a day; stools light-coloured; appetite pretty good; complains of thirst; has a cough, and expectorates without any difficulty a large quantity of muco-purulent and inodorous bloody sputa; the quantity in twenty-four hours was about a pint; the colour resembles brick-dust. On examining the chest dry râles were heard under the left clavicle. Large crepitation over the middle and lower lobes of the right lung behind. The patient complains of frontal headache and pain in the region of the liver, which is increased on pressure and on coughing. The liver appears to be slightly increased in size. Urine: sp. gr. 1010; no bile and no albumen; chlorides abundant.

On Feb. 19th he had an attack of diarrhœa—eleven stools in twenty-four hours; otherwise continues in the same condition, with very little or no constitutional disturbance. Still continues to expectorate the same quantity of sputa, having the same character. He was free from diarrhœa in a few days, but expectorated rather a larger quantity of the "brick-dust" sputa. Pain continues over the region of liver.

27th.—Sputa still the same; he is now beginning to lose flesh. He went on in the same condition for about a fortnight, when the expectoration became less.

On April 7th the sputa were much less, and the pain over the liver diminished. He was now gaining flesh.

He was discharged on the 14th, expectorating only a small quantity in the twenty-four hours. He has no pain, and has gained weight considerably since last note. The diagnosis of this case is not a positive one; but Dr. Ward inclines strongly to the heading given for the following reasons:—(1) The peculiar character of the sputa; (2) the history of dysentery; (3) the absence of dyspnœa and of many physical signs of pulmonary consumption; (4) the speedy rate at which the patient gained flesh and strength when the acute symptoms had subsided.

Should the patient again return, the further progress of the case will be reported.

WEST LONDON HOSPITAL.

PERICARDITIS WITH EFFUSION; DEATH.

(Under the care of Dr. THOROWGOOD.)

ON April 15th, William W——, aged ten, walked to the hospital with his mother, who stated that the boy had been ill for about a month, but that he had remained in bed only during the last week; no medical aid had been obtained. There was no history of rheumatic or scarlet fever either recently or at any former period.

Patient looks ill and weak; complains of pain in the chest and cough; face pale and puffy; lips slightly blue; pulse 140; weak and regular; temperature 103°. Inspection of the chest shows nothing abnormal. On placing the hand on the præcordial region, a rough grating sensation is imparted to it. On percussion the præcordial dulness is found to extend from the sternal end of the upper border of the second rib on the right side, to a point two inches and a half below and one inch to the outer side of the left nipple, and on the right side in a line half an inch to the right of the sternum. On auscultation a harsh to and fro friction sound is heard all over the præcordial region, most intense at sternal end of fourth left costal cartilage, not changed in position or character by changing the patient's posture. Towards the apex this sound is replaced by a murmur (systolic) of a soft, blowing character, heard all over the lateral and posterior regions of the left side of the chest. Lungs resonant anteriorly, and at the apices; dull at the bases. Loud sonorous râles heard everywhere. There is great tenderness over the liver, which reaches as low as the umbilicus and into the left hypochondrium. He was ordered a mixture containing citrate of potash and nitric ether, three times a day.

April 16th.—Slept a little during the night; tongue moist and clean; pulse 140, weak and regular; temperature 100°; bowels open; urine scanty, contains lithates but no albumen; feet and scrotum œdematous; cough very troublesome; physical signs not altered.

17th.—Patient was kept awake by the cough; pulse 116, very weak, but regular; temperature 99°; tongue moist; œdema of feet, legs, and scrotum increased; dulness at bases of lungs increased; other signs not altered. Ordered Dover's powder, four grains at bedtime.

18th.—After passing a restless night the patient died somewhat suddenly at 10 A.M.

Autopsy, twenty-six hours after death.—The front of the chest on being opened was found entirely occupied by the pericardium, the left lung being quite out of sight, and the anterior border of the right only being visible. The pericardium contained two ounces of turbid fluid, and the heart was very much dilated. The opposing surfaces of the heart and pericardium were covered with rough nodules, and concentric waves of lymph, which could be torn off in thick tough pieces. There were one or two recent adhesions. All the cavities of the heart were dilated, more especially the right. The walls were about their normal thickness. The mitral valve was thickened and contracted; the other valves quite healthy. The right pleura contained fourteen, and the left six ounces of clear serous fluid. Lungs collapsed; congested at the bases. Liver both displaced and enlarged; showed good example of nutmeg liver on section. Kidneys perfectly healthy.

Though the early history of this case was imperfect, still enough was gathered to show that the boy's friends considered he had been ill a month. The state of the heart and pericardium found after death testified to the large amount of disease which had gradually developed during his illness while at home and under no regular medical treatment. It was difficult to believe that the thickened and contracted state of the mitral valve could not be of rheumatic origin, though there was no history of a true attack of rheumatic fever. The treatment, on his admission to the hospital, was directed with a view to overcooming any rheumatic tendency that might be lurking in the system, and at the root of the cardiac and pulmonary disease.

WORKHOUSE HOSPITAL, MANCHESTER.

LEUCOCYTHÆMIA; GREAT HYPERTROPHY OF SPLEEN; CONSTANT DEPOSIT OF URIC ACID IN URINE.

(Under the care of Mr. W. A. PATCHETT.)

MARY H——, aged twenty-three, unmarried, was admitted into the Workhouse Hospital on October 20th, 1871, complaining of a tumour in the abdomen and great weakness. Up to the commencement of her present ailment she had always had good health. Five years and a half ago she had small-pox mildly, after recovery from which she felt weak and languid. She gradually lost strength and flesh, when, eighteen months after the attack of small-pox, her friends noticed that she looked "swelled," and she perceived that there was a hard mass more to the left side of the abdomen. She had no pain, and never had had any. For above six years she had been accustomed to bleed at the nose every day, and sometimes several times in a day, to the amount of three or four tablespoonfuls. At times she had lost as much as a pint of blood. Catamenia had never appeared since about the time she observed the

tumour. The epistaxis had been in greater quantity at monthly periods.

State on admission.—The patient is of small stature, lean but not emaciated, and of pale complexion. Before she had small-pox she says she was stout and ruddy. Is very anæmic. The abdomen is considerably enlarged. On examination the whole of the left side is found occupied by a hard tumour. The tumour is movable, and, on relaxing the abdominal muscles by drawing up the knees, can be plainly felt emerging beneath the cartilages of the false ribs from the splenic region. It is hard and smooth to the feel; the upper edge passes away to the right above the umbilicus, it then passes obliquely downwards and to the right, three inches external to the umbilicus, to the right groin, curving round below along Poupart's ligament. The tumour has a sharp anterior curved edge, and a notch is very distinctly felt in the right iliac region. The tumour can be moved from side to side; it also moves up and down with respiration. Percussion over the tumour is dull throughout; a bowel sound can be obtained on deep percussion for a distance of four or five inches to the left of the edge of the tumour opposite the umbilicus. The circumference of the abdomen around the widest part (opposite the umbilicus) measures forty-four inches. There is no fluctuation, no pain, or tenderness. The liver is enlarged. The respiratory and cardiac sounds of the chest are normal. Pulse 92, small and weak; temperature 98·2° F. Tongue clean and moist; gums pale; all teeth decayed, and some lost; appetite poor; bowels costive. The urine is pale-amber colour, acid, clear, specific gravity 1018, and contains very copious deposit of light-brown crystals of uric acid, some of which under the microscope appear rhombic, others lozenge-shaped. The patient has no pain anywhere, and complains of nothing but "weakness and the tumour." On examining the blood drawn from the extremity of the finger microscopically the white corpuscles were found to be enormously increased in number, the blood at first sight appearing to consist altogether of white cells, until it was examined more closely, when the red were seen to be in rouleaux. The proportion was, on carefully counting several specimens, a hundred red to ninety white cells.

The patient had been in hospital about three weeks when she fell down some stone steps, and fractured the base of the skull, from the effects of which she died. Whilst in hospital the urine was examined daily, and always presented a copious deposit of crystals of uric acid. Epistaxis recurred almost daily, on two occasions to such an amount as to require plugging of posterior nares.

Post-mortem appearances.—The spleen was enormously hypertrophied; it weighed 12 lb. 6 oz., and measured in length, 18 in.; in breadth, opposite widest part, 10 in., and 6 in. in thickness. Liver was enlarged; it weighed 8 lb.; structure healthy. Mesenteric, axillary, and lumbar glands all enlarged. Heart and lungs perfectly healthy in structure. The blood in the right cavities of heart and large veins firmly coagulated, the clots consisting of two portions, a reddish-black layer at lower part, and a yellowish one at upper part of clot, the former consisting of red corpuscles with some white cells, the latter almost entirely of white blood-corpuscles. The sinuses of brain were filled with coagula. (A fracture of base of skull was found running across sella turcica.)

Remarks.—This was a well-marked and typical case of leucocythæmia. The persistent presence of an excess of uric acid in the urine was interesting as tending to confirm the theory of Liebig on the pathology of uric-acid deposit. Of course a deposit of uric acid does not always indicate that there is an increased excretion, but its presence was constant, and there was a copious deposit in urine voided only half an hour previously. The opponents of Liebig's theory (particularly Dr. Golding Bird) say that in all diseases attended with excessive debility, especially where an anæmic state exists, a deficiency of uric acid occurs, and that the diminution of uric acid is best observed after losses of blood. Liebig's theory is that when in the exhausted tissues containing protein the vital force is no longer able to resist the chemical action of the oxygen which is conveyed to them in the arterial blood, it combines with their elements and forms products, among which uric acid is the chief. Thus, 1 atom of the elements of protein with 91 atoms of oxygen are equal to the equivalents of uric acid, carbonic acid and water. Liebig believes that the oxygen conveyed in the red blood-corpuscles, converts the insoluble uric acid into soluble urea, and therefore whatever increases the number of red blood-discs must cause the more complete conversion of uric acid into urea, and less of the former and more of the latter will appear in the urine; and, conversely, whatever interferes with oxygenation must produce an excess of uric acid. Dr. Bird says "so far as recorded facts are concerned they fail altogether to give the slightest support to Liebig's ingenious theory." The facts in this directly confirm the views of Liebig, and oppose those of Bird. Dr. Bird says, "a deficiency of uric acid occurs in anæmia, and especially after losses of blood." In this case there was great anæmia, and there had been an almost daily loss of blood for six years and a half. In three other cases of leucocythæmia that Mr. Patchett has seen there has been an excess of uric acid, but he has not observed it in ordinary cases of anæmia.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 1ST, 1872.

DR. BRAXTON HICKS, F.R.S., PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Fellows of the Society:—Michael Coote, M.D. (Quebec); N. S. Kerr, M.D. (Dunstable); Jos. McMonagle, M.D. (St. John's, New Brunswick); W. K. MacMordie, M.D. (Portadown); F. D. Niblett, M.B. (Hackney); and John Wallace, M.D. (Liverpool).

DR. WYNN WILLIAMS exhibited a large-sized Mucous Polypus he had removed from a patient who was seven months pregnant. The polypus protruded from the os uteri; it was ligatured, and then cut off. Another small one was also removed by torsion, and the parts were swabbed with a saturated solution of tannin and spirits of wine, which completely arrested the slight bleeding.

DR. PHILLIPS referred to a similar case, in which a few days previously he had been induced to remove a mucocellular polypus from the cervix at the sixth month of pregnancy, on account of the hæmorrhage it caused. It seemed necessary, in deciding the question of the removal of a polypus during pregnancy, to take into consideration the amount of disturbance to which it gave rise; but generally he thought that abortion was less likely to be induced by the removal of a polypus hanging from the os uteri than by allowing it to remain.

DR. ROUTH mentioned a case which he had seen in the country. He advised that labour should be brought on, and then the polypus removed to prevent the bleeding. Labour, however, came on spontaneously, and the polypus was apparently torn away during the passage of the child's head. He thought it quite safe to remove a polypus attached to the external os only, but to remove a polypus with a pedicle attached within the cervix he considered hazardous, and very likely to bring on a miscarriage.

DR. BARNES exhibited (for Dr. James Blake of San Francisco) a Modification of Hodge's Pessary, consisting in the substitution of watch-spring for the usual solid side bars. This modification gave elasticity to the pessary, which, whilst it increased its leverage action, diminished the risk of shock or concussion.

The PRESIDENT exhibited (for Mr. Greaves of Stafford) a large Growth from the Mouth of a Fœtus. Referred to Dr. Black and Dr. Potter for a report.

DR. WORSHIP, of Sevenoaks, showed a large Malformed Fœtus, delivered by craniotomy.

DR. GODFREY, of Enfield, exhibited a Placenta with a very large fibrinous effusion, which, judging from the history of the case, was doubtless due to syphilis.

DR. MADDEN said that other causes besides syphilis would produce a similar appearance, and that an examination of the placenta, apart from the patient's history, would hardly lead to the conclusion that its morbid condition was due to syphilis.

DR. BRUNTON and DR. BARNES referred to the distinctive characters of fatty and fibrinous degeneration. Dr. Barnes

said that in the syphilitic placenta the albuminous or fibrinous effusion was uniformly distributed. There was, as Virchow said, hyperplasia.

Mr. MILWARD, of Cardiff, read an account of an Anencephalous Fœtus, and of another malformed fœtus, supposed to be due to maternal mental impression at an early period of pregnancy.

Dr. NEWMAN read a paper, a sequel to one published in the Society's Transactions for 1867, on a case in which the Cæsarean section was successfully performed; but in a subsequent pregnancy delivery was accomplished per vias naturales. The local conditions which obstructed labour in 1866 were believed to be due to malignant disease of the cervix uteri. In August, 1871, the patient presented herself, and she was found to be three months pregnant. The cervix felt hard, and there was a feeling of deep lines of hardness about the whole lower part of the uterus, but otherwise the parts were nearly natural. Pregnancy was allowed to go on to full term. The cervix was then dilated by Barnes's elastic bags, and the long forceps was applied to supplement ineffective uterine action. The child was born alive, and the mother's subsequent progress was uninterruptedly good.

Dr. BARNES said, that when he saw the case there was no distinctive mark of malignant disease, only a cicatricial condition of the os uteri. The cure of extensive malignant disease was so rare that a suggestion which had been made, that the disease was pelvic cellulitis, seemed worthy of observation. On the other hand, the uterus was movable, which was consistent with cancer affecting the cervix only, but hardly with cellulitis. Dr. Habit had related a case in which a mass of cancerous tissue was cast off by sloughing and recovery with cicatricial atresia followed.

Dr. PLAYFAIR said, that he had seen in Calcutta a case of labour in which the pelvic cavity was so blocked up with exudation, probably from pelvic cellulitis, that the Cæsarean section had to be performed. He thought that in Dr. Newman's case the condition was chronic inflammatory induction of the cervix.

Dr. ROGERS described a case which he had recently attended. The patient was forty years old, and in labour with her first child. After partial dilatation with the elastic bags, the cervix was so thick and rigid that it was necessary to scarify and carefully incise it. The dilator was reapplied, and the cervical ring gave way, tearing into irregular warty pieces. A live child was born, and the patient was doing well.

Dr. ROUTH referred to a case of malignant disease he had seen at Vienna, in which the cervix uteri was torn off as a hard ring by the child's head; and another case, in which it was torn across, and death soon followed. In Dr. Newman's case the description given would apply to ordinary carcinoma; but it would also apply equally to a chancre, which might have become phagedænic. Hard cervices were frequently evidence, not of cancer, but of syphilis.

An abstract of a paper by the PRESIDENT, "On the Anatomy of the Human Placenta," was then read. The paper began by discussing the foundation of the sinus system, as first propounded by John Hunter. It was shown how the injection he used would almost certainly produce an irruption of blood amongst the villi. The walls of the dilated vessels, as they ramify in the decidua serotina on its inner or ovular surface, are so very delicate that the force of the syringe, so unlike the action of nature, is nearly certain to break them down. A description of the arrangement and condition of the vessels formed a subsequent portion of the paper. The evidence of Goodsir and other observers was then reviewed. The second part of the paper proceeded to discuss the fact that blood being found amongst the villi after natural expulsion was no evidence in favour of or against a sinus system, because in the vast majority of placentæ naturally shed there are lacerations and denudations of the decidua serotina, which would admit blood into the so-called cavity of the placenta. The author then argued that the placenta being examined *in situ* without any injury whatever, if no blood be found among the villi, this was conclusive against the existence of a sinus system. Dissection of four specimens was given. In two not a trace of blood was found, in the other there was a trace; in one of these the origin was clearly traced to a small clot extravasated among the villi, in the other to a laceration of the villi themselves. Further evidence was added, derived from three placentæ called "fatty"; in these, although the decidual vessels were highly distended with blood, yet the intervillal space was absolutely free. Dissections of ova were given to show that at no time of pregnancy is there a trace of a transition state, which is assumed by some authors. The openings of the uterine glands can be observed to full term, no membrane passing over them on the ovular aspect of the decidua serotina, and the opaque tips of the villi are traceable without any membrane over them till full term. The author quoted also the behaviour of hæmorrhage, for if the placental cavity were fed necessarily by blood from the mother's vessels, then any rupture into its cavity ought to be attended by severe and continuous loss, which is contrary to fact. A sinus system is proved by extra-uterine fœtation not to be a necessity. In the uterus the existence of decidual processes with large sinuses in them brings the blood halfway through the placental thickness, and the peristaltic movements of the uterus would doubtless facilitate the exchange of elements.

Dr. SNOW BECK said he had no doubt that the anatomy originally described by the Hunters and confirmed by subsequent anatomists was correct, and that there existed vascular communications between the uterine sinuses and the cells or great cavity of the placenta, through which the maternal blood flowed. He denied that the openings apparent after the separation of the placenta are accidental lacerations. He undertook to show the openings which existed on the uterine surface of the placenta upon any recent placenta immersed in pure water.

Dr. MADGE, on the other hand, said that, after working a great deal at the subject, he was convinced that the Hunterian doctrine respecting the utero-placental vessels was a mistaken one.

Reviews and Notices of Books.

On the Treatment of Pulmonary Consumption by Hygiene, Climate, and Medicine, in its connexion with Modern Doctrines. By JAMES HENRY BENNET, M.D., M.R.C.P., late Obstetric Physician to the Royal Free Hospital, &c. Second Edition. London: J. & A. Churchill. 1871.

DR. BENNET'S very special experience of phthisis is well known, and gives a peculiar value to his book. He has been the subject of phthisis. But not only so, he has been the subject of those changes which we call the cure of phthisis, in which the tendency to death is arrested and the ability to do the work of medical practice is restored. This subjective knowledge of phthisis is a very peculiar advantage in a physician, and when to this is added a large clinical and objective experience of the disease, we must receive his teaching with much deference. It is one thing for a medical man to say he has seen lungs in which there were evident remains of once considerable cavities in a state of perfect quiescence, the patient having died of some other disease; and quite another to be able to tell us of his experience of cold-sponging and other treatment when his pulse was 100, his skin hot, and two or three cavities were diagnosed in his lung by various physicians of authority.

It is not our object to review Dr. Bennet's book in detail, inasmuch as his views are well known, and, further, because this is the second edition of his work. It differs from the first edition chiefly in the expression of a very decided preference on the part of the author for the pathological or histological views of Dr. Hughes Bennett as compared with those of Virchow. Dr. Henry Bennet prefers the histological teaching of his namesake to that of Virchow chiefly because, according to him, Virchow's view leads to the opinion that phthisis is set up by a local irritation or inflammation, which in its turn leads to treatment either too slight and trivial or too antiphlogistic. His ideas of phthisis are—that it is essentially a disease

of lowered general vitality; that the local plasma is an exudation from the bloodvessels, deficient in organisation and in organising force; and that these evils are to be met only by sthenic measures, mainly of a hygienic and dietetic character—though having a great faith in proper medicines, particularly cod-liver oil. Dr. Bennet says that many patients are practically deceived as to the real importance of their disease by the more recent *aliases* of phthisis, such as "a little lung trouble" (a favourite synonym in America), "chronic pneumonia," "catarrhal pneumonia," &c.; and, in consequence, fail to see the necessity for that prolonged struggle for life and health which is essential to the cure of phthisis when it is once manifested. Dr. Bennet testifies to the very frequent association of uterine and pulmonary disease, and to the impossibility of curing the latter while the former is uncured. Though we apprehend that every sensible practitioner would agree with Dr. Bennet as to the necessity of getting rid, if possible, of a serious uterine disease, his statements on this subject should be well pondered by the profession. It is here that the bias of the specialist ekes out; but when a physician has been compelled to study two specialties, he approaches to a more broad point of view, and is entitled to have his statements well weighed. We need not say that in Dr. Bennet's system of treatment climate figures very conspicuously; but it is only part of a sensible system of sthenic treatment which has produced really marvellous results, and which is well expounded and powerfully enforced in this work, which we commend to the perusal of all our readers. Dr. Bennet's book is a valuable contribution to the literature of phthisis, whether considered clinically or therapeutically.

The Urine and its Derangements, &c. By GEORGE HARLEY, M.D., F.R.S. Pp. 376. London: J. and A. Churchill. 1872.

THIS work contains eleven lectures originally delivered to a mixed class of medical men and advanced students over a period of ten years, and afterwards published in detached portions and at varying intervals in the pages of a contemporary. The first two lectures are devoted to a general consideration of the physiology of the urine; the next seven to its constituents, taken separately, as urea, uric and hippuric acids, uro-hæmatin, phosphoric and oxalic acids, inosite, creatine, cholesterine, &c.; whilst the last two lectures are exclusively occupied with the subjects of diabetes and albuminuria. The general physiology of the urine is shortly but well given, and embraces all the principal points of interest. In regard to the formation of urea, Dr. Harley thinks that it is not the special product of any one particular tissue or organ, nor that it is exclusively derived from the disintegration of superfluous albuminous compounds, but that it is the united product of all nitrogenised effete matter, which is perhaps as correct a view as can be at present advanced. Pretty full details of the chemistry of urea, of its physiological and pathological relations, and of the mode in which it is estimated, are given. The other constituents are described in a similar manner.

The mode in which the book has grown, so to speak, out of lectures composed and given some of them a long time ago, will account for some of the omissions which are observable enough. Thus, to mention one only, the very important topic of the action of alcohol taken into the stomach upon the quantity and chemical composition of the urine, a subject which has received so much attention at the hands of Drs. Anstie and Dupré, Dr. Parkes, and others, has been, so far as we can see, wholly overlooked, the only reference to it being a notice of the experiments of Böcker, made many years ago. The mode of testing for alcohol in the urine by means of bichromate of potash and a little sulphuric acid seems to us to be likely to become useful in enabling house-surgeons and others to distinguish between those cases which are so often alluded to in the daily papers under the head of "Drunk or dying." The chapters on albuminuria and diabetes are the most valuable part of the work, giving the results of Dr. Harley's own observations.

OUR LIBRARY TABLE.

Introduction to the Study of Biology. By H. ALLEYNE NICHOLSON, M.D., &c., of Toronto. W. Blackwood and Sons. 1872.—Dr. Nicholson is already well known as the author of the best treatise on Zoology, in moderate compass, that we possess; and the present volume is an expansion of the introduction to that work. It is intended to supply the student with the elements of biological knowledge, and with the definition and explanation of the principal terms met with in the ordinary works upon this subject. Thus it treats of the differences between living and dead bodies, the distinctions between animals and plants, the principles of classification, and the general phenomena of nutrition and reproduction, whilst full definitions are given of such terms as analogy, homology, species, genus, &c. A chapter is devoted to spontaneous generation; another to the consideration of the Darwinian theory, and others to the distribution of species in space and time. It is a work that might well be taken as a text-book for the higher classes in schools, but in such case the teacher should have plenty of specimens to exhibit, and the boys should be encouraged to describe the specimens; the teacher should also himself possess a tolerably good knowledge of botany and zoology. Drawings are given of the principal types of the animal kingdom.

Chloride of Ammonium in the treatment of Hepatic Disease. By WILLIAM STEWART, M.D., Surgeon, 21st Fusiliers. Reprinted from the *Madras Monthly Journal of Medical Science.*—The facts brought forward in this pamphlet are interesting and suggestive in the way of indicating the advantages that occasionally result from the employment of chloride of ammonium; but the evidence is insufficient, as it seems to us, for the purpose of proving what Dr. Stewart claims for the chloride of ammonium—namely, that it exerts a specific action in preventing or curing abscess of the liver. The pain of a neuralgic character, or that connected with inflammation of fibrous textures, which often attends hepatic affections, appears to have been much relieved by the administration of the salt, but we must await the results of further observation and experience. In the meantime we would urge Dr. Stewart to continue his investigations, and now that he has directed attention to the subject we make no doubt that he will not have to wait long before the experience of others will enable us to form a correct judgment of its therapeutic properties.

On the Tendency of Disease to cause Disease; illustrated by the Pathogeny of Secondary Diseases of the Heart and Lungs. A Graduation Thesis. By W. H. SPENCER, M.A., M.B. Cantab., Fellow of the Cambridge Philosophical Society. London: H. K. Lewis. 1872.—The idea worked out in this thesis is, that in structural disease generally there is that which is potential for harm—that which under certain circumstances will always produce disease. The inquiry touching the relations between causal disease and its effects is confined, first, to the consideration of structural disease, as involving intrinsical conditions which lead to its further development in some form; and, secondly, to the consideration of structural disease as superinducing other disease by neutralising conditions which normally obstruct its progress; and the author's illustrations are drawn from a group of

special organs—the heart and lungs. An appendix on the pathogeny of secondary diseases of the lungs and heart illustrates the statements advanced in the general thesis. The views are suggestive, and they are skilfully worked out.

On Spurious, Feigned, and Concealed Pregnancy. By T. MORE MADDEN, M.D., M.R.I.A. Dublin: Falconer.—Dr. Madden's experience leads him to believe that the morbid condition of spurious pregnancy, which he terms pseudocyesis, is of more frequent occurrence than is generally supposed, a large number of such cases, occurring chiefly about the climacteric period, having fallen within his observation during the last few years, the patient in nearly every instance asserting that she felt fœtal movements. The two causes of pseudocyesis which the author particularly treats are molar pregnancy and hydatiform disease, and he adopts the theory that the latter is the result of degenerative pathological changes in embryonic structures already existing in the uterus. The subject is illustrated by the history of several cases recorded in the pamphlet.

The American Journal of the Medical Sciences for April, 1872. Edited by ISAAC HAYS, M.D., assisted by T. MINIS HAYS, M.D. Philadelphia: Henry C. Lea. London: Trübner and Co.—We direct our readers' attention to "Hay's Journal" in consequence of its possessing, among a host of indifferent medical publications of the present age, some excellent features of its own. The reviews of medical works, and the analytical and bibliographical notices, are generally well done, and it is very seldom that some papers of ability and practical utility are not to be found among its original contributions and cases. For example, in the present number, Dr. Parry's remarks "On the Pathological Anatomy, Causes, and Treatment of Rickets," is a most painstaking and exhaustive production; the review of the evidence in the case of a lady charged with poisoning General Ketchum, that lately created much excitement in America, is both interesting and instructive; the description of an epidemic malarial colic, Dr. Attlee's cases of ovariotomy, and other papers are worth reading. The trial of the poisoning case, we may observe, was marked by the same conflict of professional opinion, both medical and chemical, among the experts that so often takes place in other countries.

The Monthly Microscopical Journal. No. XLI., May 1st, 1872. Edited by HENRY LAWSON, M.D.—This number contains the following articles:—1. Researches on the First Stages of the Development of the Common Trout (Salmo fario), by Dr. E. Klein. 2. On the Classification and Arrangement of Microscopical Objects, by Dr. James Murie. 3. On Bichromatic Vision, by J. W. Stephenson. 4. The supposed Fungus on Coleus Leaves, by Henry Slack. 5. Optical Curiosities of Literature, by the Rev. Leslie Brakey, M.A.; besides the usual notes.

Food, Air, and Water. May. Edited by A. HILL HASSALL, M.D.—The title of Dr. Hassall's new periodical is sufficiently comprehensive and explicit to indicate the nature of its contents. The information it conveys is concise and clear, enabling the sanitarian and consumer to see at a glance the latest legislative changes effected or impending in matters relating to our physical comfort and well-being, while the moderate price at which it is issued (3*d.*) brings it within the reach of all.

Floating Kidney; its causes, diagnosis, and treatment. A paper read before the Midland Medical Society, 1871. By JAMES SAWYER, M.B. Lond. Birmingham: White and Pike.—This little pamphlet is a reprint from the *Birmingham Medical Review.* The author, like Sir Wm. Jenner, prefers the term "floating kidney" to "movable kidney." All the examples observed were in women at some period after childbearing, but no fresh light is thrown upon the subject.

REPORT OF THE LOCAL GOVERNMENT BOARD.

THE Report of the Local Government Board has just been issued—a report which is, in fact, an account of the proceedings of the old Poor-law Board, the Medical Department of the Privy Council, and of the so-called Local Government Act Office. And so the matters treated of in the report are divided into three heads: first, the administration of the laws relating to the relief of the poor; secondly, the administration of the Local Government and Sanitary Acts; and, thirdly, the administration of the laws relating to the public health.

In the present notice more cannot be done than to state in the most general terms the information which the report gives in the last two sections, the first section being a matter which may be noticed presently, whereas the other two sections have just now, when the alteration of the sanitary law is a subject of discussion, a peculiar interest for our profession. Our notice, however, must be confined to recording the facts which the report gives, leaving discussion for a future time.

In these days, when the cry for sanitary reform is so urgent, it will not be deemed amiss if we give the amount of the money spent in the execution of sanitary works; and it will be cheering to think that the over and over again reiterated opinion of earnest medical practitioners that this class of work is deserving of the utmost attention is beginning to have effect. This is clearly shown by the figures which give the amounts borrowed for sanitary works in each of the years from 1850 to Aug. 1871; the total amount borrowed being £10,319,544. In 1851 the amount was £103,700, in 1856 it was £522,700, in 1865 it was £870,300. This was all under the Public Health and Local Government Acts. From Aug. 1867 to Aug. 1868 (the really first year under the new Sanitary Acts), the amount was only £623,400, but in 1869-70 the amount had increased to £785,100, and in 1870-71 to £1,266,581. The application in one year for this large amount of upwards of a million and a quarter is good proof that the public are at last becoming alive to the necessity which exists for, and to the good which will result from, the carrying out of works of drainage, water-supply, and such like. The remainder of the report is confined to the discussion of the working of the present health statutes.

Mr. Simon's report, like the preceding one, also discusses the working of the existing sanitary statutes, but that is a subject which it is not proposed to touch in the present notice. We propose, as in the former case, to give particulars as to the work done by the Medical Department only; and the first fact which Mr. Simon states is one which is sufficiently startling. He says, when speaking of small-pox: "It appears to have killed in England within the year nearly 23000 persons, including 7876 of the population of London"; but, as Mr. Simon points out, this plague was not confined to England, but raged in the chief towns of Holland, in Paris, and in Hamburg (of which epidemic we gave particulars from time to time), where, although its population is but a tenth of our London population, the deaths were nearly two-thirds as many as in London, the consequence being, as Mr. Simon gives it, that the Government of that country was led "for the first time to pass a law of compulsory vaccination." The proceedings taken by the Medical Department consisted of advising the authorities of the places where it prevailed, urging vaccination, isolation, and disinfection, general instructions having been issued on these subjects.

There are also in the report references to the cholera orders which were issued for the guidance of seaport authorities, and more especially of those ports which are in communication with the Baltic; and one great feature in the advice given in this connexion was urging upon the authorities the necessity of their having adequate hospital accommodation so as to isolate any case immediately on its arrival. Mr. Simon alludes to a matter which has been brought to his notice by Mr. J. Netten Radcliffe, one of the inspectors of the department, with reference to the migration of cholera from Asia. He points out that the development of the traffic south of the Caucasus has brought Persia into such easy and frequent communication with the

Euxine as virtually "to have established a new route for the migration of Asiatic cholera into Europe," by which route Mr. Radcliffe thinks it highly probable that the present infection of Russia was brought about. And in connexion with the railway between Baku on the Caspian and Poti on the Euxine, Mr. Simon adds: "It is of course an obvious and serious consideration, that in proportion as movement becomes quicker towards the great markets of Europe from the constantly infected pilgrimage resorts of Persia and India, there is withdrawn one of the protective conditions which have hitherto made cholera so exceptional in Europe." With this we agree, and hence again must urge the necessity of our being so prepared that, if neighbouring European countries do by their neglect assist its progress westward, it shall not be able to find even a momentary resting place in this kingdom.

The report then deals with the ordinary matters looked after by the Department, such as the distribution of vaccine lymph, of which a quantity equal to 283,583 charged ivory points was sent out; the inspection of public vaccination, and the awards of grants from the money voted by Parliament, to the amount of £7339 11s. 8d. The inquiry made by the Select Committee of the House of Commons on vaccination is also alluded to in this report, but as that matter has already been noticed by us, we need not here again refer to it. Inquiries were made in fifty-five cases in regard to the local administration of common sanitary law.

HOMERTON FEVER HOSPITAL.

VACCINATION STATISTICS.

Compiled by ALEX. COLLIE, M.D.; SHIRLEY F. MURPHY, M.R.C.S., M.S.A.; and FRANCIS J. CAREY, M.A. Lond., M.R.C.S., Medical Officers of the Hospital.

THE hospital was opened for the reception of small-pox patients on the 15th of February, 1871, and was closed in the middle of June of the same year. We admitted in all 1294 cases; but 294 of these are not included in the following tables, as they were under treatment whilst our statistics were being made up. These tables are not presented in the belief that additional evidence is required in support of the utility of vaccination; but chiefly as showing once more the difference between good vaccination and bad vaccination, and the necessity for revaccination about the period of puberty. That these things are not sufficiently impressed upon some members of our profession appears on the face of the tables themselves. In table No. I., for instance, it will be seen that of 670 vaccinated cases, 49 only had been vaccinated in the way that we here regard as *well*. The need for revaccination about puberty is shown both by the number of fairly vaccinated persons who take small-pox about or after that age, and by the fact that of 1294 persons admitted into the Homerton Fever Hospital suffering from small-pox, not *one* had been revaccinated.

TABLE I.—*Showing the Mortality from Small-pox in relation to Vaccination* (1000 *Cases.*)

DEGREE OF VACCINATION.	Under 15 years of age.				Above 15 years of age.			
	Total.	Recovered.	Died.	Deaths per cent.	Total.	Recovered.	Died.	Deaths per cent.
Unvaccinated	208	131	77	37·0	122	76	46	47·7
One or more bad marks	45	42	3	6·5	104	89	15	14·4
One or more indifferent marks	12	12	0	0	75	66	9	12·0
One good vaccination mark	61	61	0	0	101	93	8	7·9
Two good vaccination marks	29	29	0	0	104	99	5	4·8
Three ,, ,, ,, ...	35	35	0	0	39	39	0	0
Four ,, ,, ,, ...	17	17	0	0	32	32	0	0
Five ,, ,, ,, ...	2	2	0	0	1	1	0	0
Six ,, ,, ,, ...	2	2	0	0	11	11	0	0

TABLE II.—*Showing the influence of different kinds of Vaccination and of Age, in the case of patients not revaccinated, in determining the Severity, short of Death.* (*From 745 cases of recovery.*)

DEGREE OF VACCINATION.	Mild Small-pox.				Severe Small-pox.				Hæmorrhagic or Black Small-pox.
	Under 12 years old.	Attacks per cent.	Above 12 years old.	Attacks per cent.	Under 12 years old.	Attacks per cent.	Above 12 years old.	Attacks per cent.	
Not vaccinated	42	56	98	19½	26	100	79	51	
One or more bad marks ...	12	15	109	22	0	0	35	23*	
One good mark	3	2½	100	20	0	0	14	9	No recoveries
Two good marks	0	0	104	21	0	0	17	11	out of 15 cases,
Three good marks	10	12½	48	9	0	0	6	4	2 of whom had
Four good marks	6	7½	20	4	0	0	0	0	been vaccinated.
Five good marks	0	0	3	·6	0	0	0	0	
Six good marks, and more...	1	1	11	2	0	0	1	·6	
Total	74		493		26		152		
Small-pox cases admitted after revaccination...	None		None		None		None		None

N.B.—The percentages have not been carried to minute fractions.

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

THE seventeenth festival of this College was held at Willis's Rooms on Friday, the 10th inst., under the presidency of the Right Hon. the Viscount Midleton. About 100 guests were present, including General Sir George Laurence, C.B., Dr. Burrows, Sir Charles Locock, Bart., M.D., Sir William Fergusson, Bart., F.R.S., Sir John Heron Maxwell, Bart., R.N., the Mayor of Brighton, Mr. John Brady, M.P., Dr. Lush, M.P., Rev. Dr. West, Mr. Henry Sterry, Dr. Walter Dickson, R.N., Major Harding, Mr. Erasmus Wilson, Dr. Carr, Major Macleay, &c. It may be as well to remind our readers that this admirable institution was first projected in 1851, under the auspices of the late Mr. Propert, and that two years later the first stone of the College was laid by Earl Manvers in the name of H.R.H. the Prince Consort, who was prevented by illness from being present. In June, 1855, the Prince formally opened the building, and since that date a chapel, an "Albert

Wing" for pensioners, a large school-room, additional class-rooms, an atelier, swimming-bath, gymnasium, and laboratory have been added. The school now contains 200 resident pupils, 50 of whom are foundation scholars, being educated, boarded, and clothed at the expense of the institution, and the remainder receive an education of the highest class at a scale of £45 a year. There are also 24 resident and 15 non-resident pensioners, and five will be added to the latter class at the forthcoming election. The school continues full, and there are several valuable exhibitions, among which are a Gilchrist Scholarship, and a Forest Exhibition, each with £50 a year for three years, and a free Medical Scholarship, open to the whole school, which is given annually by the authorities of St. Bartholomew's Hospital.

The toasts at the dinner were for the most part of a purely complimentary character, but the brevity of the speeches by no means equalled the brilliancy of the vocal music, which latter was in every respect enjoyable and satisfactory. It was announced that upwards of £1000 had been collected in donations at the dinner.

COURT OF EXCHEQUER.

(*Sittings in Banco, before* BARONS MARTIN, BRAMWELL, *and* PIGOTT.)

ANDREWS (APPELLANT) *v.* STYRAP (RESPONDENT).

THIS was an appeal under 20 and 21 Vic., cap. 90, sec. 40, against the conviction of the appellant by the magistrates of Shrewsbury.

The applicant, a druggist, had used the letters "M.D." after his name in his accounts for professional attendance and medicines, though his name did not appear in the Register published by authority. He produced, however, a diploma of the University of Philadelphia, United States, of the year 1870, after the Act was passed, but it did not appear that he had ever visited the place or been examined before a qualified tribunal.

Mr. Huddleston, Q.C., and Mr. Bullen were counsel for the respondent; Mr. R. Vaughan Williams appeared for the appellant.

The learned counsel for the respondent urged that, inasmuch as the magistrates had found the improper use of the letters as a matter of fact, the court ought not to interfere with the decision.

Mr. Williams, on the other hand, contended that there was no evidence of his client's having wilfully and maliciously used the title of doctor of medicine to satisfy the Act, and that there was no evidence of the appellant's having endeavoured to usurp the privileges or evade the liabilities of the statute. He also maintained that convictions of this kind would act with considerable hardship on many practitioners of the Scotch and foreign universities.

Their Lordships, however, were all of opinion that this conviction should be confirmed, and dismissed the appeal, with costs.

Baron Martin expressed his satisfaction that measures were being taken by the Legislature in America to suppress this issue of spurious degrees by the University of Philadelphia.

Foreign Gleanings.

TRACHEOTOMY WITH THE GALVANIC CAUTERY.

M. VERNEUIL has laid before the Academy of Medicine a case wherein, instead of the usual operation, he divided all the tissues and even the trachea with the galvanic knife. The patient, thirty-eight years of age, required tracheotomy for phthisis laryngea. The steps of the operation are very minutely described in the report to the Academy—perhaps too minutely. At all events, the operator's object was to prevent hæmorrhage, and herein he succeeded perfectly; the canula was introduced with hardly any loss of blood, and the patient has done well.

It is but just to add that M. Verneuil stated distinctly that, in the present case, the patient being a thin adult, the galvanic knife had a better chance than it might have had with a stout suffocating child.

We should look upon these operations with moderate enthusiasm, and consider them as useful *adjuncts* to the modes of operating when an appropriate case presents. M. Chassaignac, who has rendered good service with his écraseur, rode his hobby so hard as to attempt amputation of a limb and lithotomy with it. There have been surgeons at Orleans who must needs take off a leg by successive galvanic section. Among ourselves, resection of joints is performed with a little too much regard to the attraction of novelty and imitation. M. Verneuil nevertheless deserves credit for his innovation, simply because it requires more courage and activity to strike a new path than to remain in the beaten track. Still, hæmorrhage can be avoided in other ways, as has been properly remarked by the editor of *La Tribune Médicale* (May 5th, 1872). Langenbeck's dilating hook is entered between the first two rings into the trachea, and, the handle being brought under the chin, the spring separates the two halves of the hook, the bistoury divides the skin and trachea, and the canula is introduced. M. Isambert operated upon a child a short time ago in this manner, with success as far as the operation went. His first case occurred in 1868. We subjoin an example of another way of using the galvanic cautery.

M. Amussat, in 1870, operated on a boy who for a month had a pebble lodged in the trachea. The operator run through the integuments and the trachea a curved needle carrying a double platinum wire for the length of two-thirds of an inch. The needle being withdrawn, M. Amussat seized one of the wires with two forceps in communication with a trough, and cut through the texture caught by the platinum loop without causing any discharge of blood. The trachea being thus opened, the boy expelled the pebble in a fit of coughing.

CONFESSION NO PROOF OF GUILT.

The *Lyon Médical* of April 28th, 1872, refers to the case of a girl, aged twenty, supposed to be seven months pregnant. After an attack of hæmorrhage her size seemed to have considerably diminished, and the girl, being closely questioned on the subject, said that, becoming aware of a discharge, she repaired to the closet, where she stayed ten minutes. She added that all had escaped, but that she had not time to look, as she was being called by her mistress. A midwife and the parish surgeon both declared that the girl had been recently confined. She was now again assailed with questions, and told that, for her own sake, she had better make a clean breast of it, as no fœtus had been found in the closet. Perhaps, it was suggested, she had thrown it into the pigstye. The poor creature at first denied such a thing, but at last confessed that it was so. A search was made, but no child was discovered. She was tried for concealment of birth, on her own confession, and sentenced to six months' imprisonment. The girl had not been taken into custody in consideration of her free confession, and she quietly proceeded to the gaol. When admitted it was found that she was far advanced in pregnancy, and soon gave birth to a healthy girl. By the French law she could no longer appeal, as more than ten days had elapsed since the verdict; but the judge, having the power of appealing within two months, did so, and the girl was acquitted.

This case shows that confession, which is looked upon as the clearest proof of guilt, cannot always be relied upon. And what shall we say of the surgeon and the midwife? The examination was probably hurried and incomplete, and the conclusion arrived at on seeing the signs of recent abundant hæmorrhage. The case, even in a simple obstetrical point of view, is full of valuable hints.

TRANSVERSELY STRIATED MUSCLES IN ACARI.

M. Schultze's *Archiv* (Band viii.), J. H. Floegel states that he has ascertained the presence of transversely striated muscle in a species of Trombidum or red spider found in gardens. The animal should be immersed for an hour or two in a one per cent. solution of prussic acid, and dissected in weak glycerine and water. The transverse strim are remarkably distant from one another—ten myria-millimetres.

HUMAN FOSSIL REMAINS.

Cuvier did not believe that such remains existed. Was he in error? This question is handled by M. Garrigou, in a paper submitted to the Academy of Sciences of Paris. There will probably be a report upon this paper which will show whether this learned body has, since Cuvier, modified its opinions.

THE LANCET.

LONDON: SATURDAY, MAY 18, 1872.

IT is satisfactory to find that the question of sewage farming is making steady progress. Many applications have been made to the Local Government Board for powers to enable local authorities to purchase land; and important preliminary inquiries have been held at Walton (Lancashire), West Ham, Slough, Kingston, and other places; whilst the reports of existing farms continue to be favourable both in an economical and a sanitary point of view. No one now is found to deny that there is a mine of wealth in the filthy liquid which has for so many years been wasted in polluting our streams. On the contrary, capitalists are now literally fighting for the plunder, and chemical processes, considered worthless a year or two ago, now command a ready sale. We have no desire to disparage the efforts of those who are risking so much in sewage experimentation—and the public will be greatly indebted if they do nothing more than clarify the sewage before its admission into our streams; but we nevertheless believe that the full value of sewage as a manure will only be realised by the system of irrigation carried out with a scrupulous regard to the principles of economy and health. With this conviction, however, we would advocate modesty and caution. The conditions are too complicated, the experimenters too uninformed, and their experience much too crude, to justify dogmatic expressions either for or against the system; and it is particularly unfortunate that scientific professors should be found to range themselves on both sides who steadily shut their eyes to examples of success or failure, as the case may be. Sewage irrigation has quite as much to fear from injudicious friends as from avowed enemies. Professors who come forward annually at the beck of selfish land proprietors with gross exaggerations and oft-refuted statements, do very little real harm. It is open to anyone to test their statements that sewage farms are necessarily foul morasses by a visit to Romford, Bedford, or Aldershot, and truth will certainly prevail. But when the advocates of sewage irrigation push their arguments too far; when a locality incurs a huge expenditure in the purchase of unsuitable land, or only effects its object at a cost ruinous to the inhabitants of the district intended to be benefited, a blow is inflicted on the system from which recovery is difficult. Too much caution can scarcely be exercised in securing sound and steady progress. Better by far that sewage irrigation should suffer some temporary delay than that the country should be dotted over with costly works which may hereafter prove as great a nuisance as the evil they are intended to remove. To take a case in point:—A comprehensive scheme of sewerage has been proposed for the Thames Valley by one of our most eminent engineers. We by no means commit ourselves to the approval of his plan. It is sufficient for our argument that independent action on the part of every town and village in the Thames Valley between Windsor and London is likely to result in delay, imperfection, and unnecessary expense. The inhabitants of Kingston think otherwise. They desire a separate scheme; and regardless of the opposition of their neighbours, regardless altogether of engineering difficulties and of expense, they ask for powers to enable them to carry their sewage to a farm at Walton, five miles and a half away, at a probable cost of nearly £50,000. The scheme is no doubt the result of pressure, and cannot be expected to result in pecuniary success. But would not some delay be desirable in this case? Would it not be possible to adopt some temporary means of clarifying the sewage at the existing outfall, particularly as it comes into the Thames at a point where it cannot affect the intake of the London Water Companies? Eventually some more general and less costly plan may be devised, and sewage irrigation may be saved the obloquy of failure. The law has provided every facility in the Sewage Utilisation and Local Government Acts for the acquirement by public authorities of land suitable for sewage irrigation. But public authorities are not like private individuals, who may be ruined without much danger to the general welfare. In sanctioning public schemes, therefore, the officers of the Local Government Board are bound to exercise unusual discretion. They have much to contend with in the prejudices of ill-informed objectors and in the selfishness of some land proprietors. But they are likely to have quite as much difficulty with local boards and surveyors, who wish to carry their schemes, whether they are wise or not. Happily many sewage farms have been purchased of late without difficulty or objection; and in not a few instances landowners like Lords WARWICK and LICHFIELD have wisely offered to take the responsibility of dealing with the sewage brought to them. We believe that sewage may be utilised on properly prepared land without the creation of a nuisance; and we look forward to the time, not far distant, when local authorities will have no difficulty whatever in disposing of it.

There are, however, two points in which the Government could at this time render great service. They might institute an official inquiry into the economical and sanitary results of existing sewage farms. These subjects are too important to be left in the hands of *dilettanti* members of a scientific association, or to committees of gentlemen already pledged to a particular view of the case. The Local Government Board now for the first time commands the necessary staff of economists, medical men, chemists, and engineers. In the event of these gentlemen being already occupied, it would be wise to reopen the Rivers Pollution Commission, with the addition of some competent medical men, for the purpose of perfecting its work. We want a complete return of the places in which sewage has been dealt with by chemicals, filtration, irrigation, &c. The return should state whether the works are carried on by the local authority or by private persons; it should give the cost, pecuniary results, and terms of contract. The Commission should have reports on the efficiency of the systems now in full operation, and special attention should be given to the result upon the public health. Such an inquiry would afford most valuable information both to the

Government and local boards, and it would probably show the true value of sewage as a manure and the effect of its application on the labour market and the food-production of the country; whilst, from a sanitary point of view, the reports would serve to demonstrate the precautions which are necessary to secure the public health, and so tend to allay the alarms and prejudices which are not unnaturally excited by the proximity of what must be, under the best conditions, very dirty and disagreeable material.

THE trial of Mr. EDMUND EDMUNDS, solicitor at Newent, Gloucestershire, at the Central Criminal Court, for the manslaughter of his wife five years ago, is one of no slight interest to the medical profession, in consequence of the conspicuous part played in the case by a person named Dr. MATTHEW BASS SMITH, at the time of Mrs. EDMUNDS'S death in practice at Newent, and the medical attendant of the family.

Apart from this circumstance we could have little inducement to notice a case in which the evidence on the side of the prosecution was so negative and altogether so contemptible as in this case. A lady died five years ago. She was supposed by her medical attendant to labour under heart disease, and to be likely to go out some day like the snuff of a candle. In this fashion she did die one Sunday night after supper and taking part in sacred music. Dr. SMITH certified, in the usual way, death by apoplexy, and Mrs. EDMUNDS was buried, and allowed to remain in her grave four years, when, somehow or other, the police of Gloucestershire thought it their duty to urge an inquiry into the cause of death, suggesting suspicion that the death was due to some blow on the part of Mr. EDMUNDS. The chief witnesses to such a theory before the coroner and at the trial were a servant, ANN BRADD, the said Dr. BASS SMITH, and a niece of Mr. EDMUNDS—JEANETTE EDMUNDS. The new account of the circumstances of Mrs. EDMUNDS'S death dated from the occurrence of a quarrel between Mr. EDMUNDS and Dr. BASS SMITH, originating in Mr. EDMUNDS'S attempts to have Dr. BASS SMITH struck off the roll of the College of Surgeons, and his opposition to Dr. SMITH'S certificate in the Bankruptcy Court. This quarrel seemed connected with the disclosure of the fact that Dr. BASS SMITH, a married man with a family, had seduced Miss JEANETTE EDMUNDS, and kept up a long system of illicit intercourse with her. The theory of the prosecution was so slightly entertained that the jury did not spend more than a quarter of an hour in arriving at a verdict of "Not Guilty." We think that the police of Gloucestershire acted most unwarrantably in commencing a prosecution on such a basis as in this case; and we regret that the Judge did not a little more completely expose the disgraceful circumstances in which the case took its rise.

Our business is, however, not so much with Mr. EDMUNDS as with the principal medical witness who gave a character to this trial. It is humbling to think that any member of the medical profession could have acted such a part. There is, however, one comfort. No body of men, not to say no professional body of men, could contain two such characters as MATTHEW BASS SMITH. Such men are not to be spoken of in the plural number in any one profession. And he has fortunately been compelled to disclose all his own baseness. We may safely leave to the University of St. Andrews and the other bodies whose diploma he holds, and to the General Medical Council, to determine how long the profession shall be disgraced by his name. Meantime we have only to pronounce our opinion of MATTHEW BASS SMITH'S behaviour from a professional point of view, in using his position as the medical adviser and friend of a lady to seduce her niece, and on the discovery of this offence belying his own death certificate five years previously, and suggesting foul play on the part of his patient's husband, from whom prior to this discovery he seems to have received nothing but kindness, and who seems to have acted like a father to the girl whom SMITH had ruined. The Judge well said that no one could fail to perceive that the case had its origin in some very devilish source. The adjective is one that we might not have dared to use without the Judge's authority. But it is amply justified by the facts and complexion of the whole case. A medical man enjoys the confidence of the public to a higher degree than any other man. He is trusted as only sick people can trust. His tenderness is appealed to. Privacy is his privilege. What shall we say of the medical man that abuses this position to destroy virtue, and, years after he has certified to a death as occurring from natural causes, abets a theory of violence. It is no slight proof of Mr. EDMUNDS'S innocence that he treated MATTHEW BASS SMITH as he did, in a way exactly appropriate to his character and his offence, and not at all as he might have been expected to treat a man who held a true secret the disclosure of which would ruin him. We hope soon to hear that the roll of the profession is purged of the name of this man. The Medical Council, in exercising its judicial function for the purpose of purifying the Register, has sometimes a difficulty in defining the applicability of the words "infamous conduct in any professional respect." It will have no such difficulty in the case of MATTHEW BASS SMITH.

WE wish we could find room to record the names of 154 members of the House of Commons, who either in person went, or recorded their names as going, to form a deputation to urge upon Mr. BRUCE the prayer of medical memorials signed by 87 of the most eminent men in the profession, by 279 physicians and surgeons of the towns where the Contagious Diseases Acts are in operation, and by 2143 physicians and surgeons in practice in London and the provinces. These memorials, which are similar in purport, appeared in our columns when they were first prepared; and after stating facts well known to all who are acquainted with the subject, they concluded with the "earnest hope that in any future legislation on this subject, the main principles of the Acts of 1866 and 1869 may remain unaltered." The memorials were presented to Mr. BRUCE by Sir JOHN PAKINGTON, and were supported by Sir JOHN TRELAWNEY, Dr. LYON PLAYFAIR, Mr. ROGER EYKYN, and Sir J. ELPHINSTONE. Mr. BRUCE, in reply, acknowledged the importance of the deputation, and having said that it would not be right or proper for him to answer in a matter like this, promised to present it to his colleagues with all the force with which it had been laid before him.

Such a demonstration, showing as it does the determination of so many members of the House to throw off the yoke of the clique of fanatics by whom the opposition to the Acts has been organised and maintained, strikes us as one of the most remarkable instances of healthy political life which the present generation has witnessed. It encourages hope in common sense, and affords some prospect of escape from the tyranny so often exercised by mere knots of agitators.

IT is quite time that the attention of the authorities should be drawn to the imperfect opportunities presented at the general hospitals for the clinical study of fevers and small-pox, particularly as the establishment of the public fever and small-pox hospitals will diminish to a large extent the applications for the admission of this class of patients. Owing to the obscurity of the early symptoms, a few isolated cases will no doubt occasionally creep into the general wards; but it is certain that these will not suffice to give to students any adequate idea of a class of diseases presenting such varied phases and complications, and requiring such careful watching and skilful treatment. It certainly cannot be said that any medical man is qualified to practise who has not had the fullest opportunity of studying the history and treatment of diseases occupying the very first place in the mortality returns; and yet, under existing arrangements, it is quite possible for a student to obtain his diploma without having watched the progress of a single case of fever or small-pox, and without having had the opportunity of witnessing a single post-mortem examination. In some hospitals cases of infectious fever are systematically excluded, and, when admitted, are immediately sent away. In others, some very inadequate provision is made for keeping a few cases. Indeed, it would be obviously most objectionable to admit any considerable number to the ordinary wards. With the exception of St. Thomas's, no really well-constructed infectious wards exist in connexion with any of our schools.

Under these circumstances, would it not be wise to request the assistance of the Local Government Board and the managers of the Metropolitan Asylums, in order to open the Fever and Small-pox Hospitals under their charge to a limited class of students under proper regulations? Nothing but good can come to the patients, for no other supervision is so likely to secure for them adequate attention and the most skilful treatment; whilst the public will reap the advantage of better medical education. Medical students will no doubt incur some risk; but this is their duty, and the consideration of danger must not be allowed to interfere with their due qualification. Indeed, it should be the duty of the examiners to require a certificate of a short attendance at one or other of these hospitals when there are no other contagious wards to which they can have access.

THE next meeting of the Association of Medical Officers of Health, being the last of the present session, will be held to-day (Saturday), at 7.30 P.M., when Dr. Henry Letheby will read a paper bearing on the present epidemic of small-pox.

Medical Annotations.

"Ne quid nimis."

THE COLLEGE OF SURGEONS.

THE Council of the College of Surgeons met on Monday last, and made the necessary arrangements for the annual election to the Council in July. There was no report from the Committee appointed to carry out the details of the scheme for a Conjoint Examination; but, as we know that the College of Physicians is about to elect its four representatives for this purpose, we presume the solemn secrecy of the College of Surgeons' Committee will soon be broken through. The secretary announced himself unable to furnish the looked-for return of passed and plucked students of the several schools at present, owing to the labours of the recent examinations for the membership diploma. We hope the return will be forthcoming in time for the schools to take action, if necessary, before the next winter session.

A discussion arose as to the courses of Practical Physiology and Practical Surgery, concerning which a fear was expressed that in some schools these courses were shirked by both teachers and pupils. We fear there is an element of truth in this, and that the same might be said to a certain extent with respect to actual dissection. We are glad at all events that Mr. South and Mr. Erichsen carried a motion calling upon the anatomical teachers to make a return of the number of subjects used for dissection during the past session, and the number of pupils in the anatomical class.

DR. PETTIGREW ON CIRCULATION.

ON Friday, the 10th inst., Dr. Pettigrew delivered his second lecture on the "Physiology of the Circulation in Plants, in the Lower Animals, and in Man," before the Royal College of Surgeons in Edinburgh. The vessels of plants and animals, he showed, were both constructed on the same type—the function of both being to convey nutritious juices to the tissues which on all occasions lie outside the vessels. Imbibition is the process by which animal and vegetable tissues are nourished—a fact to which there is no exception; the vessels having no other object than the conveyance of nutriment to the immediate neighbourhood of the growing tissues. In animals there are three kinds of vessels: the arteries carrying pure or bright-red blood, the veins effete or dark-purple blood, and the capillaries mixed blood. The tissues imbibe from the latter. In plants there are also three kinds of vessels—those conveying crude sap, those conveying elaborated sap, and a vascular system lately discovered in the leaves and roots, which he compared to the capillaries of animals. Vessels in plants, unless when quite young, are rigid; those of animals are elastic. While the vessels of plants can take no active part in the circulation, those of animals have, in some cases, distinct rhythmic movements, which greatly assist that process. Such rhythmic movements are found in the veins of the bat's wing, the saphenous veins of the rabbit, the mesenteric vessels of the frog, and the caudal vessels of the eel. Dr. Pettigrew proceeded to show that the vermicular movements of the alimentary canal (of the œsophagus and stomach particularly) greatly resemble those of certain vessels, and of the heart itself, having a power of alternately contracting and expanding, which they employ in propelling the food and the circulating fluids. Between the stomach, the heart, and the hollow muscles generally, all of which are similarly constructed, there is an analogy—it being a matter of indiffer-

ence whether the material conveyed be fluid, semi-fluid, or solid. The power possessed by the hollow muscles of contracting and expanding in parts, the sphincters, when existing, opening or expanding when the viscera to which they are attached close or contract, he dwelt upon as enabling the muscles alternately to seize and dismiss their contents—to manipulate the same with regularity and precision. In the vegetable cells, movements occur in great variety, the cells of plants having a circulation of their own, quite apart from the general circulation of plants, but quite as distinct. The movements of plants, he further showed, resemble in some respects those of animals, the spores of certain algæ being furnished with cilia "enabling them to lead an itinerant life until they find a suitable habitat." Dr. Pettigrew called particular attention to the rhythmic movements of the leaflets of the *Hedysarum desmodium gyrans*, which approach or recede from each other every few minutes. More curious and wonderful still are the rhythmic movements of the *Volvox globator*. "At a certain period of the development of this simplest vegetable organism, there appear in each zoospore, or in the bands of protoplasm with which the zoospores are connected, vacuoles, spaces, or cavities of about $\frac{1}{7000}$th of an inch in diameter, which contract with regular rhythm at intervals of from thirty-eight to forty-one seconds, quickly contracting and then more slowly dilating again, precisely as in their own hearts." Very remarkable are the rhythmic movements of plants, the more especially as they occur in the absence of nerves, muscles, and all those structures commonly regarded as essential to this kind of movement. Dr. Pettigrew sat down amid much applause. The third lecture occurs on the 17th inst.

CONSTANT WATER-SUPPLY FOR LONDON.

IT is announced that the Duke of Richmond, who was Chairman of the Royal Commission on Water-supply, will preside at the inquiry about to be held by the Board of Trade with reference to the regulations under which the constant service system is to be introduced in London. This inquiry is expected to occupy a considerable time, and on its completion the Water Companies will be required, after four months' notice, to give a constant supply under the regulations approved as the result of the inquiry. A Parliamentary paper recently issued contains much valuable information upon this subject, consisting of reports made by Professor W. Pole, F.R.S., on the constant-service system generally, and on the modes of distribution adopted in towns where that system has been adopted. On the general question, it is satisfactory to find that, besides those sanitary advantages which the advocates of the constant system have claimed for it, an economy in the consumption is a further attainable result; Mr. Pole stating that "where the measures of control are efficiently carried out their effect is to reduce the consumption to a very moderate amount—much less, for example, than is now used in London under the intermittent supply." With regard to the introduction of the constant system in London, Mr. Pole considers that it will be necessary almost entirely to reconsider the state of the existing distributing arrangements; but he gives us this comfort, that the experience of other towns shows that this apparently formidable undertaking may be approached with confidence. The chief difficulty is found everywhere in dealing with the lowest class of property, but the experience already acquired in East London shows that this is not insuperable, and the suggestions to be found in Mr. Pole's reports will materially assist in the solution of the problem of waste-prevention among the poor. Much, no doubt, will have to be done in the better classes of houses where imperfect and defective fittings lead to a great waste of water now, which must be prevented as far as possible if the full benefit of the constant system is to be experienced by the consumers. We strongly endorse the suggestion that the inspections rendered necessary by the change of system should be made thoroughly and effectively at the outset, so that subsequent inspections may be as little troublesome and inquisitorial as possible. In conclusion, Mr. Pole expresses himself as satisfied that, under proper administration, the constant system will lead to a diminution in the quantity of water requisite for the supply of the metropolis. The present total consumption is thirty-three gallons per head per diem, or twice what it is in Manchester, and nearly three times what it is in Norwich under the constant system.

RELIEF FROM THE RAIL.

ARE our readers at all anxious to gratify their "instincts of escape" from the "noise, the strife, the questions wearisome, and the vain splendours of imperial London," and to enjoy, on a reduced scale, something like the Horatian journey to Brundusium? Let them take a seat on the coach that starts every morning from Piccadilly for Dorking, and under the artistic guidance of General Sir Henry de Bathe, or of that

"Non auriga piger,"

Major Withington, be wafted gently away into the lovely silvan scenery of Surrey, and, to the merry music of a beautifully manipulated four-in-hand, take in "the harvest of a quiet eye" that extends with progressively increasing richness from Tooting to North Cheam, Ewell, Epsom, Leatherhead, and Dorking. Bowling along at the pleasant rate of eight miles an hour, the passenger enjoys all the exhilaration of quick motion and constantly varying scenery without the insidious vibration, the exhausting monotony of noise, the tax on the eye imposed by the "rushing landscape," with its sudden apparition and vanishing of objects, that almost entitle railway travelling to a place in the Public Health Bill. Nor is it only the agreeable stimulus afforded to the body that rewards the passenger for his journey. The soothing effect of richly wooded, softly outlined uplands, alternating with "sleepy hollows" mantled in dense green shrubbery—of meadow lands "browsed by deep-uddered kine," or tranquil forest glades dotted with fallow deer, is varied by the moral influence of the historical and legendary associations thickly strewn on either side of the route. Defoe's chapel at Tooting; the antique wall, the sole surviving witness to the past glories of Merton Abbey; the site (alas! only the site) of Nelson's house,—are succeeded by the medical interest attaching to the pretty labourers' cottages erected by Mr. Garth, Q.C., and the old tavern at Epsom from which Dr. Arbuthnot, then a Scottish adventurer, saw the break-down of Prince George of Denmark's carriage, and came to the rescue of His Royal (and severely shaken) Highness with a skill which made him court physician shortly afterwards, and landed him at the winning-post of the professional Derby. These and many other recollections rise up before the passenger till the exquisite loveliness of the scenery from Leatherhead to Dorking suppresses all effort of mind but the passive enjoyment of effects in outline and colour never yet embodied on canvas. Arrived at the drowsy little township sacred to poultry, the passenger wakes up from his reverie, and may enjoy a stroll in the pleasant vicinage, or, if need be, a substantial refection at the quaint old inn. At 4 P.M. he is again in his box-seat, and leaves Dorking with the sense of having fought a battle there against ennui, fag, overstrain, anxiety, and the thousand assailants of pro-

fessional life, with a success only parallel to that with which the German invader rolled up the English lines when led by the gallant but unscientific nominees of purchase! All prosperity, then, to the "Dorking Coach," and all honour to its gallant owners for the addition of a new, healthful, and recreative remedy to our moral pharmacopœia.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

MR. CRITCHETT presided at the last meeting of this Society, held on the 14th inst. Mr. Curling communicated a short paper by Mr. Jeremiah M'Carthy in connexion with some renal calculi of unusual shape, which latter were exhibited at the meeting, having been taken from the left kidney of a woman who had died of cancer of the uterus. An interesting discussion ensued on a case (by the same surgeon) of artificial anus made in the small intestine for obstruction, which obstruction proved to be caused by a cancerous growth which involved the termination of the transverse and commencement of the descending colon. Pyæmia formed the subject of the next paper. The synovial and serous membranes are considered by Mr. Hamilton of Liverpool, the author of the paper, to be the first tissues attacked in this disease. He finds a resemblance in the mode of attack between acute rheumatism and pyæmia; and also in the way in which each disease spreads from one joint to another. Believing that pyæmia dates from a poison germ which may be introduced from without, or have its origin within in some depraved and vitiated states of the system, he maintains that it goes at once to certain tissues of the body, these being either one of the synovial or of the serous membranes, or often both, and that it there multiplies by a rapid increase of the same germ life with which it originated, and is from thence carried to like tissues, producing the same effects in them. Mr. Hamilton further states that, in three instances, the pyæmic pus from a living patient was examined immediately on removal from the body, and found to be teeming with leucothytes. In this he corroborates Dr. Burdon Sanderson's view, that such pus does contain the earliest forms of life. Dr. William Murray, of Newcastle-on-Tyne, followed with a paper on the Treatment of Large Internal Aneurisms, *apropos* of Mr. Moore's case treated some time ago by the wire coil at the Middlesex Hospital.

A CHAPTER IN THE HISTORY OF CHOLERA.

WE have been favoured with an abstract of a paper entitled "A Chapter in the History of Cholera," recently read before the Historical Society by Mr. B. G. Jenkins, of the Inner Temple, and stated to have been founded on a communication to the Russian Imperial Academy of Sciences. So far as can be made out from the abstract, the paper appears to have been an elaborate mystification of the Society. Of history in the sense in which it might be supposed that the Historical Society had to deal with that subject there is not a trace; but of speculation as to the etiology of cholera there is a sufficiency to startle the mildest hypothesist, and we can hardly permit ourselves to suppose that it can have been uttered in sober earnest. Mr. Jenkins gravely tells us that, "instead of one 'home' of cholera in the Delta of the Ganges there are seven, all situated in or near the Tropic of Cancer, equally distant from each other, of which the most important is that at the mouth of the Ganges; that the others are to the east of China, to the north of Mecca, on the west coast of Africa, to the north of the West India Islands, to the west of Lower California, and among the Sandwich Islands; and that a reference to the map would show that the recorded appearance of cholera over the globe may be satisfactorily explained by supposing seven atmospheric streams, each 1400 miles in breadth, to proceed in a south-west direction; and that at some periods, as in 1833, 1850, and 1866, nearly all the streams were in activity." This is somewhat laboured fun it must be confessed, but we can conceive the amusement of the author, as, without a dread of immediate detection and with serious aspect, he "chaffed" the learned members of the Society on a subject entirely beyond the range of their special studies. It might have been conceived, however, that some of the members at least would have seen, that to use the word "cholera" as Mr. Jenkins used it, in a sense obviously peculiar to himself alone; and that to place three of the asserted "homes" of this malady, newly invented for the occasion by Mr. Jenkins, in the open ocean, was arrant nonsense. Mr. Jenkins, however, clearly knew his audience well, else it may be presumed that we should not have received an abstract of the paper from the "historiographer" of the Society. Mr. Jenkins's "atmospheric streams" next appear as "cholera streams," and a like jumble of words and sense runs throughout the abstract. Mr. Jenkins was, happily, content with mystifying his audience in detail as to certain of the telluric phenomena of "cholera" in his meaning of the term, but he intimated that he was prepared, if the Society gave him occasion, to take it boldly into the wide question of the cosmical relations of the disease. He maintains that "cosmic" influence lies at the origin of cholera; that cholera is intimately connected with annual displays and with solar disturbances. "I believe," he adds, "that I am able to show that a remarkable connexion exists between the maxima and minima of cholera epidemics and of solar spots." He believes, indeed, he can show that "cholera epidemics have a period equal to a period and a half of some spots." If Mr. Jenkins will do this he will receive much honour from epidemiologists; but before he can hope to succeed in the attempt, he will have to learn what is meant by the terms "cholera" and "cholera epidemic."

THE HOSPITAL FOR INFECTIOUS DISEASES, COLCHESTER.

IT is probably in the recollection of our readers that some time ago the local authorities at Colchester determined upon erecting a fever hospital in connexion with the Poor-law Union of that place, and that Dr. Bree, in particular, took grave exception to the site which the proposed hospital was to occupy. Dr. Bree held that the building in course of erection would prove a nuisance and source of danger to the town of Colchester from its proximity to a public road and some cottages, and from its being close upon a very populous neighbourhood—the north of Colchester. A Poor-law Inspector proceeded from London to inspect the site and the building, and gave it as his opinion that the former was an eligible one. The building was consequently constructed, and it has since been utilised for the reception of cases of small-pox. The board of guardians, have, however, had good cause for regretting that they did not sufficiently honour the prophet of their own, for it is now beyond all question that what Dr. Bree foretold has come to pass. The mischief has been done; for small-pox has been communicated in eight or ten instances to the inhabitants of the cottages within a few yards of the hospital, and other cases of the same disease have appeared in the north part of the town, the origin of which is, probably, also attributable to infection derived from the same source. To do the local authorities justice, they have had the candour to admit the facts, and some of them have gone so far as to express their regret at not having bowed to the judgment of those who possessed the requisite medical and sanitary knowledge to constitute them safe guides in this matter.

It is now proposed to erect a temporary iron hospital to meet the present emergency. Now that the Government are pressing their Sanitary Bill through Parliament the Colchester case affords a good example of the inefficient character of a board of guardians or corporation for carrying out such matters, and it becomes a question whether large towns ought not to have special sanitary boards to carry out the provisions of the Act.

KING'S COLLEGE.

A LARGE and influential meeting was held at Willis's Rooms on Tuesday, for the purpose of raising a fund for liquidating the debt on King's College, a debt amounting to £13,000. The assembly was presided over by the Archbishop of Canterbury, whose opening remarks were followed by an eloquent speech by the Premier. The observations of Mr. Gladstone were adroitly brought to bear upon a question prominently occupying the minds of thoughtful people at the present time—viz., the relation of science to revelation on the one hand, and to ecclesiasticism on the other. On this twofold subject, the right honourable gentleman, as was to be expected, uttered no uncertain sound. Without attempting to discuss the merits of this complex question, we may just recall a remark made, we believe, by the late sagacious and devout Frederick Denison Maurice, that every "discovery" is a "revelation." A sum of several thousand pounds was the response given to the earnest appeals of the various speakers at the meeting.

THE LONDON HOSPITAL SCANDAL.

MR. MAUNDER is irrepressible, and it will be seen that he has written to us again. We beg leave to assure him that we know all about the circumstances of the case, and have been fully informed concerning them from the beginning. The acts of the House Committee, and of the Quarterly Court, and of the so-called Court of Inquiry, were all communicated to us; and we have at present nothing to say with regard to them excepting that they are totally irrelevant to the issue. That issue is—Can it *ever* be justifiable that one surgeon to a hospital should denounce another to the lay authorities as being unskilful and unfit to continue in his office?

Mr. Maunder is like a lapwing; and he seeks to flutter away from this, the real question, to others which have nothing to do with it. We do not care one iota whether Mr. Rivington is skilful or unskilful, whether an accident happened in his operation or not, whether the accident, if any, was such as might have happened to Liston, or was one that common prudence would have avoided. We do not care whether the House Committee, after having been snubbed by the Quarterly Court, and after finding that the rest of the staff could not support Mr. Maunder before the "Court of Inquiry," ate their humble pie with a good grace or with a bad one; this being the only question elucidated by the precise words of the "finding." We assert that all these matters are unimportant; and that Mr. Maunder stands before the bar of professional opinion charged with gross disloyalty to a colleague.

We say, further, as we have said before, that a clear majority of the medical staff of a hospital might have good grounds for representing a colleague as unskilful. But they could only rightly do so by joint action, after mature deliberation and full notice to the person implicated, in words settled and agreed upon by resolution, and with a proper sense of their heavy responsibility and of the probable consequences of their act. And, if occasion for such a proceeding should ever seem to arise, there is a precedent which would probably first be followed. A sometime surgeon to a metropolitan hospital was uniformly unfortunate in his operations. The other surgeons met, and, having conferred on the case, represented to their colleague that he had better cease to operate for a year, endeavour to improve himself during the time, and then try again. The kindly advice was accepted and acted upon, and the surgeon ultimately became a very skilful and successful operator.

The course pursued by Mr. Maunder may perhaps best be rendered evident by reflecting on what would happen if it became general. What hospital could be carried on if each surgeon were a spy and informer against the rest?—what consultations would be possible if Mr. A felt it his duty to tell the friends of the patient that Mr. B was a bungler and a blockhead? The result of such talebearing would be almost insignificant by the side of the inconveniences that would accrue from it.

PRINCE BISMARK'S INDISPOSITION.

As various more or less alarming rumours have been circulated with regard to the cause of Prince Bismark's temporary retirement from official work, it may be well to say that there seems to be no good authority for any belief that the German Chancellor is suffering from any serious illness. The story about excruciating pains in the leg, the result of some former quack application, bears its apocryphal character on its face. As regards the persistent insomnia from which the Prince has been suffering, it will be well to remind people that there may be the greatest possible difference in the significance of such a symptom as sleeplessness, according to the circumstances under which it occurs. When it arises as the mere result of strenuous and harassing mental application—as we have every reason to believe to be the case with the Prince, it is a sufficiently familiar phenomenon, and physicians know that timely rest will be pretty sure to set everything right. That no more grave view of Prince Bismark's case than this is taken by his own physicians is evident from the fact that he has even been permitted to return for a time to his parliamentary duties. We are also in a position to state that, among persons in London, the best informed as to German official doings, there is no sign whatever of any serious uneasiness about the Chancellor's health.

PREVENTIVE MEDICINE APPLIED TO SHIPPING.

AT the April meeting of the Dublin Local Marine Board, Dr. Charles F. Moore, Medical Inspector of Seamen, Dublin, communicated with the Board on the value of preventive medicine as applied to shipping, which is so often the vehicle of diffusion of infectious disease. At the present time, when epidemic diseases are so rapidly succeeding one another, it is more than ever necessary to adopt all known means to endeavour to arrest their spread; and nowhere is this manifestly so much to be desired as in Great Britain and Ireland, inasmuch as the commercial relations of the United Kingdom are on such an extended scale with the whole world that any interruption of trade caused by quarantine, which has been already conditionally enforced against us in at least one country, will, if extended, necessarily interfere with our well-being. It appears well, therefore, that the profession should draw the attention of the authorities to the importance of the prevention of disease, were it only on commercial grounds. Moreover, as Dr. Moore shows, the interests of any population demand that its own members should be protected from infectious disease by strict measures at the ports. Our insular position should thus be made conducive to the public health, which in turn would prove of much value to our trade with the rest of the world.

REMOVAL OF CHRIST'S HOSPITAL.

THE Governors of Christ's Hospital are evidently alarmed by the announcement of the offer of a site near Wellington College. The fact, however, that such an offer has been made was not denied; and the best objection they are able to bring forward is that it would not do to have two large schools in such close proximity. We shall simply inquire whether the governors now experience any inconvenience from St. Paul's, the Charter House, and the City of London schools, all of which are nearer than the new school need be to Wellington College. It is just about as reasonable to object to the proximity of Broadmoor Lunatic Asylum. The fact is that every large school has bounds beyond which the boys cannot go without permission; and the "callings over" are so managed as to secure an observance of the rules laid down. So far from being an objection, the proximity of two large schools presents many advantages. It is calculated to promote emulation and friendly rivalry; the interchange of courtesies between masters as well as boys. It enlarges the somewhat narrow society of isolated schools. It would enable the governors of the two establishments to combine to obtain more efficient professors, particularly in the case of scientific lectures. We repeat that nothing can justify the retention of the hospital in Newgate-street, even if no railway should be made.

SMALL-POX AT WALSALL.

THINGS have come to a pretty pass when a population of 37,000 has to record twenty-one deaths from small-pox in one week out of a mortality of thirty-nine. Dr. Ballard has been sent down by the Local Government Board to confer with the local authorities. The medical profession considers almost each of these deaths as preventable as though the twenty-one persons had been killed by the neglect of a pointsman on the railway. The sanitary condition of the dwellings is shocking. There were tenements in Navigation-street, according to Mr. Palmer, the union medical officer, where there were no privies in use and excrement was kept in houses for months. There are, of course, hundreds of unvaccinated children. Vaccination and revaccination, and a copious and careful insertion of the vaccine lymph, are the only measures that will stop the small-pox epidemic, which shows no sign of diminution; though, of course, the unhealthy condition of the houses must have its effect on the mortality of the cases. The district affords a fine illustration of the confusion of sanitary authorities. There is the usual dispute as to whose duty it is to provide a small-pox hospital. Meantime the patients are shut up in the houses we have described. The mortality of such towns is to be properly regarded as a judgment for neglect of the most obvious duties and the most effective and simple preventives.

THE FOUNDING OF GUY'S HOSPITAL.

THE Autotype Company have added another to their beautiful reproductions of pictorial *chefs d'œuvres*, in a splendid transcript of Cope's picture (so much admired at last year's exhibition) representing Thomas Guy conferring with Dr. Mead, the physician, and Mr. Stear, the architect, upon the plan of the hospital. Printed in permanent pigments, the product of the Autotype Company will form an interesting addition to the art-collection of every medical school. The impressions may be had on application at the hospital for the sum of 7*s.* 6*d.* The profession in general, and old Guy's men in particular, should not miss this opportunity of adorning their library walls with such a masterly representation of one of the most striking and momentous incidents in the history of medicine.

DR. LIVINGSTONE.

THE Council of the Royal Geographical Society, according to the President, have formed a favourable opinion of the authenticity of the intelligence received by telegram as to Dr. Livingstone. A misunderstanding, however, had to be cleared up as to the relations between the Doctor and Mr. Stanley. It had been generally inferred that Mr. Stanley had discovered and relieved Dr. Livingstone; whereas the reverse was the case. "Dr. Livingstone," said Sir Henry Rawlinson, "was in clover, and Mr. Stanley in destitution." Mr. Stanley must have had great difficulty in reaching Ujiji, the head-quarters of Dr. Livingstone's supplies; and it was much to his credit that he had performed the journey under such circumstances. "The Society's own expedition," he added, "would be the means of enabling both Dr. Livingstone and Mr. Stanley to finish the researches they had begun." Full letters from Zanzibar would arrive in the course of a fortnight, and would no doubt confirm the Society in its unabated confidence as to the trustworthiness of the telegram and the safety of the Doctor.

A NEW MODE OF DEALING WITH SEWAGE.

ON Wednesday evening, at the Faculty of Arts, Major-General Scott, C.B., proposed a novel method of clarifying sewage. He puts lime and clay into the sewers at some distance above the outlet, in the same proportion as that used in making Portland cement. The admixture clarifies the sewage on the same principle as the lime process, and the deposit falls with great rapidity. The sludge is dried and burned; the organic matter helping the combustion, and the resulting cement is found to be of excellent quality. The process was approved of generally by Mr. Odling, Dr. Voelcker, Dr. Frankland, Mr. Rawlinson, C.B., Mr. Bramwell, C.E., Dr. Letheby, and the chairman of the evening, Mr. T. Hawksley, President of the Institution of Civil Engineers.

COTTAGE HOSPITALS.

WE are very glad to record the opening of the Devizes Cottage Hospital, which took place on the 7th inst. The site has been given by Mr. Sotheron Estcourt, and the hospital is a plain building of red brick, relieved with black brick arches to the doors and windows, and Bath stone dressings. The ground-floor comprises an entrance-hall, dispensary, kitchen, scullery, and larder, and a single-bedded ward. There are two wards on the upper floor, each containing three beds, and of such dimensions that each patient will have a cubic space of 1010 ft. The walls are lime-whitened, the woodwork is stained and polished, and the building is lighted throughout with gas. There is a smaller building for infectious cases some little distance off, which will afford accommodation for four patients, the walls being lined with silicate zopissa. Mr. Weaver, the architect, has given his services; and the total cost of the building has amounted to less than £950, exclusive of furniture. Much of the success of this undertaking is due to the energetic exertions of Dr. Edward Clapham, who, when Mayor of Devizes several years ago, pointed out to the municipal authorities the advantages of such an institution, and has since kept the subject persistently before them. We recommend medical mayors to follow so good an example, and wish all prosperity to the Devizes Cottage Hospital.

The new hospital at Savenake is to be opened on the 22nd inst. by the Bishop of Salisbury. It has been erected by public subscription, and the land has been given by the Marquis of Ailesbury. The building will accommodate twenty patients.

UNIVERSITY COLLEGE.

SIR WM. JENNER, Bart., presided at the distribution of prizes to the medical students of University College, London, on Thursday last. At the close of the distribution, Sir Wm. Jenner delivered an address to those present, in which he pointed out how his sympathies lay both with the successful and unsuccessful competitors; for that he had, as a student, had fortune and misfortune, more frequently the latter. He sympathised with those who were compelled by the *res angustæ domi* to cease their studies prematurely, for he had himself undergone that vicissitude at one time; and he sympathised with those who were obliged to embark in the most useful and honourable career of a "general practitioner," for he had done the same.

Passing on to speak of class-prizes, Sir Wm. Jenner maintained that they were beneficial, by making knowledge exact and by enabling men to forge for themselves the key to unlock the cells in which memory lay hid. He deprecated too general devotion to any one theoretical subject, but maintained that so long as men, whether in their student career or in after life, strove only for the truth, the setting before them of a prize, whether a medal now, or great honours and wealth hereafter, only stimulated them to greater exertions. Sir William brought a most eloquent and frequently applauded address to a close by wishing those who were leaving the College to embark on the business of life, heartily God-speed."

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

THE last meeting of this session was held on the 3rd inst., under the presidency of Mr. J. M. Burton. There was a large attendance, and an interesting and practical paper was read by Mr. William Johnson Smith on the Treatment of Simple Fractures of the Lower Extremity. The subject was treated in a very able manner, and most of the members present took part in the discussion, including Drs. Gooding, Purvis, and Carr, and Messrs. Burton and Lockhart. The President afterwards read the particulars of a case of Malignant Disease of the Bladder. We take leave to record that it is far more profitable to provoke discussion on such a subject as that brought forward by Mr. Johnson Smith than to read notes of "wonderful" cases, which may (or may not) occur to practitioners *once* in a lifetime; and that the West Kent Society has on several occasions set a good example in this respect, which other and more pretentious bodies may follow with advantage to all concerned.

QUEEN'S HOSPITAL, BIRMINGHAM.

THE extension of this hospital proceeds in separate portions (according to the original plan); and of these the most prominent—the out-patient department,—commenced last December, is making rapid progress. As at first conceived, this portion would have cost about £5000—a sum nearly all raised, mainly by working men; but better and ampler accommodation for officers, nurses, &c., being urgently required, the original plan has been modified. It is now proposed to make complete provision, in this department, for the treatment of the diseases of women, and for a dispensary and pharmaceutical laboratory for the whole hospital. These and other items will require a sum of £5000 over and above the funds already at the disposal of the institution. Under these circumstances the committee of the Queen's Hospital appeal to Birmingham and the Midland Counties in the hope that a liberal response will enable them to complete the whole of the required additions. Subscriptions should be forwarded to the chairman.

THE VACCINATION ACTS.

IT is gratifying to see indications in some towns of the triumph of common sense over prejudice in the matter of compulsory vaccination. The West Derby guardians have resolved to petition against Mr. Pease's Bill proposing that only one penalty should be inflicted for non-compliance with the Acts. The returns of the registrars of Wolverhampton, from the 21st of August to the 31st of December, showed that of the 532 children born in the east district, 417 had been successfully vaccinated, and 12 had had small-pox; and that of the 382 born in the west district, 296 had been vaccinated, and 1 had had small-pox. The new system of giving to the registrars the duty of seeing that every child born is duly vaccinated has proved to have worked satisfactorily. The registrars account for every child, with the exception of 6 in Wolverhampton and 3 in Bilston; and all had been vaccinated, except those who were unsusceptible, sick, or who had died or removed.

THE FORMATION OF GLYCOGEN IN THE LIVER.

SOME years ago Dähnhardt removed the glycogen from numerous livers, and then found that, by the action of gently oxidising substances, glycogen could be obtained, which, by the action of saliva, was again convertible into sugar. In other words, he maintained that there was or might be a post-mortem formation of glycogen. Dr. Luchsinger has lately repeated these experiments in Kühne's Laboratory with a different result. He thinks that Dähnhardt did not entirely remove the glycogen originally present, and that if this were thoroughly and completely extracted by rapid division of the organ after death, and boiling the pulp in successive quantities of water till all opalescence had ceased to appear, no further formation of that substance would occur.

POST-MORTEM EXAMINATIONS AND THE ST. PANCRAS GUARDIANS.

THE board of guardians has had to eat humble pie in the matter of their medical officer (Mr. Hill) making post-mortem examinations. The report of the General Committee set forth "that the Committee had consulted with the solicitor of the board respecting the conduct of Mr. Hill in making post-mortem examinations; and that gentleman informed them that, in terms of the 6th and 7th of William IV., cap. 89, sec. 5 and 6, the medical officer was compelled to attend the coroner's inquests, and it was his duty, should the coroner call on him, to make a post-mortem examination where he had been the last medical man who had seen the deceased; and the coroner had only power to call in another medical man when it was suspected that the attending medical officer had not displayed proper medical skill." The report was adopted, though it evidently went very much against the grain of several of the guardians.

ASYLUM ABUSES IN BELGIUM.

"NIHIL est ab omni parte beatum"; and Belgium, the country to whose asylums patients used to flock for good treatment, and whither medico-psychologists repaired to witness the same, has lately been convicted of asylum abuses, almost equal to some of our own. In the asylum at Evere a very flagrant homicide was committed the other day, and a searching inquiry into the circumstances was followed by a criminal prosecution of the persons implicated, which closed on Saturday the 11th. The trial took place at Brussels, and the sentence condemned the director to two years' imprisonment; Van Leuwe, jun., to twenty-six months' imprisonment; Spellekens, the warder, to two

years' imprisonment; and Dr. Holsbeck to eighteen months' imprisonment and a fine of 2000 francs. These penalties are severe, but not excessively so, if Belgium means to preserve her high and even historical reputation for her kind and remarkably efficacious treatment of her lunatics.

THE IMPERIAL MEDICAL SOCIETY OF THE CAUCASUS.

ON April 17th, His Imperial Highness the Grand Duke Michel Nicolaievitch, the lieutenant of the Emperor in the Caucasus, was present at the annual meeting of the Imperial Society of Medicine of the Caucasus, held at Tiflis. The President, addressing the Grand Duke, expressed the gratitude of the Society that, owing to his gracious intercession, the Society had been permitted to adopt the style "Imperial." The Grand Duke, responding to the President, stated that the Emperor, in granting permission to the Society to adopt the style "Imperial," had been pleased to express himself in very complimentary terms respecting the Caucasian medical men.

CHELSEA HOSPITAL.

A CORRESPONDENT calls our attention to a circumstance which, if there be no mistake, certainly appears a glaring anomaly, considering the pains taken to conserve the Thames and the expense that has been incurred in re-stocking the river with fish. The sewage of Chelsea Hospital is daily emptied into the river opposite the Vauxhall Waterworks, and, when the sluices are opened, the scene may be easily imagined. If the ratepayers are condemned under pain of a heavy fine to remove their sewage by the proper channels, the authorities of the hospital should be likewise compelled to do the same. The approach of summer is calculated to increase the deleterious influence of a polluted river on the inmates of the hospital and those inhabiting the surrounding neighbourhoods.

PHILADELPHIA DEGREES.

IT will be seen in another part of THE LANCET that the judgment of the Shrewsbury magistrates as to the illegality of the use of the title "M.D." on the strength of a degree procured, *in absentiâ* and without examination before a qualified tribunal, from the University of Philadelphia, United States, has been confirmed by the Court of Exchequer. It may be hoped that those who were not hindered by considerations of taste and self-respect from using these worthless titles will now be hindered by the wholesome fear of a fine of twenty pounds. Too much praise cannot be given to the medical men of Shrewsbury, and especially to Dr. Styrap, for their perseverance in this matter. Their labours are now crowned with success; and it is to be hoped that we have seen and heard the last of these worthless degrees.

THE PECULIAR PEOPLE.

THE law has been once more invoked with regard to the Peculiar People, whose peculiarity seems to be that they have religious scruples against employing doctors. We think it would be a great mistake to attempt anything like persecution against these obscure sectarians. If we had efficient sanitary laws and proper provision for the isolation of contagious disease, then of course the Peculiar People could have no privileges of spreading infection accorded to them. But while we allow all the contagia to diffuse themselves at their own sweet will, it would be mere folly to take trouble about stopping up this little chink. It seems hard upon the children of the Peculiar People that they should suffer or die needlessly as victims to the crotchets of others; but if there be anything in hereditary influence, and if the children are likely to grow up as great fools as their parents, the loss is probably not great to society.

THE CONVERSAZIONE OF THE PHARMACEUTICAL SOCIETY.

THIS Society held a very brilliant conversazione at South Kensington on Wednesday last. Upwards of 3000 guests were present. The entire suite of rooms, including the picture galleries, were thrown open to the visitors, glees and madrigals were sung in the lecture-hall, and the band of the Coldstream Guards performed in the central hall; refreshments were abundant, and the entire entertainment was most enjoyable and satisfactory. We congratulate Mr. Bremridge and the committee on the successful result of their energetic exertions.

THE PUBLIC HEALTH BILL.

NUMEROUS amendments of the Public Health Bill have been placed upon the notice paper by Mr. Muntz, Mr. Dimsdale, Mr. Corrance, and Dr. Playfair. Mr. Rylands has given notice of a resolution condemning the 33rd clause, which is intended to secure the rivers from pollution; and Dr. Lyon Playfair's proposals are, to some extent, a compromise. The Government amendments are all settled, and will be published immediately after the recess. It is their intention to proceed with the measure at the earliest possible date, and to press it forward with energy.

THE PRINCE OF WALES.

IN spite of the rainy weather encountered by his Royal Highness on Lake Como, the Prince of Wales has benefited greatly by his sojourn in North Italy. Travelling incognito, the Prince has enjoyed a completeness of relaxation wellnigh impossible in England; and, gay as Milan is, even there his Royal Highness was able to saunter through the galleries and art collections without interruption to that "still life" so salutary to his health.

THE EMPRESS OF THE FRENCH.

WE have been favoured by the Baron Corvisart, the physician in immediate attendance on Her Majesty the Empress of the French, with the following bulletin:—

"La santé de l'Impératrice se remet chaque jour plus visiblement. S.M. a pu reprendre ses promenades à l'extérieur; et nous cesserons de donner des nouvelles de cette convalescence bientôt terminée."

We have much pleasure in adding that His Majesty the Emperor continues to enjoy perfect health in his retirement at Chislehurst.

LADY CHARLES KERR.

LADY CHARLES KERR continues to improve. The symptoms are now reduced to some slight indication of periosteal lesion with occasional headache, decreasing, however, in severity; while there is still inability to distinguish objects with either eye. The twelfth week, since the accident, passed on Monday, and, with the above-noted exceptions, her progress towards recovery has been quite satisfactory.

COLONEL ANSON.

WE are glad to learn that the hon. and gallant colonel makes satisfactory progress towards recovery. For some days there has been no hæmorrhage, while the general health improves visibly under the influence of tonic treatment and sustaining diet.

DOCTORS' COACHMEN IN EDINBURGH AND "THE SABBATH-DAY."

IN these "striking" days everybody must have a turn. The doctors' turn can't be far off. Meantime their coachmen in Edinburgh are ventilating their grievances, in public meeting assembled, after the spirited fashion of the "Dundee maids." The following resolution was passed: "The doctors' coachmen, having met and taken into consideration the length of time they are daily on duty, and the additional Sabbath labour they have to do, resolve to bring the matter under the notice of their employers, with a view to some arrangement being come to which shall free them from Sabbath duty; and that a committee be appointed, with power, by conference or otherwise, to lay the matter fully before their employers, and to report to a subsequent meeting." As a rule, we think medical men should do without their private carriages, when necessary, on Sundays. But "the Sabbath was made for man"; and, if sick people need it, doctor and coachman must give attendance, and do it willingly, after the fashion of Him who did good on the Sabbath-day. We have no doubt the matter will be amicably arranged.

WORKHOUSE MILK.

DR. RANDALL, the medical officer of the Marylebone Workhouse, has recently reported on the quality of the milk supply. The quantity of cream ranged from 6 to 2 per cent. As the average in good milk is from 8 to 12 per cent., it is clear the poor are defrauded to a very considerable extent. Why not adopt the contract of the Liverpool guardians—viz., each supply to be tested, 10 per cent. of cream being the standard agreed upon. One halfpenny per gallon is deducted for each one per cent. under, and one halfpenny added for each per cent. over. This is fair to all parties.

WE regret to learn that the pecuniary condition of the London Hospital is by no means satisfactory. Every year the demands upon it are increasing, owing chiefly to the great extension of large industrial works in the immediate neighbourhood; whilst its funds show no sign of proportional increase. The present annual deficit may be measured by some thousands, and it is obvious either that some new sources of income must be provided, or an extensive reform of the administration must be made, with the object of reducing the expenditure. We venture to direct the attention of the management to the possibility of instituting a more efficient inquiry into the means of the patients, with the object of diminishing imposition and enabling those who have the means to contribute to their own maintenance. We would also urge them to assist us in obtaining a "Hospital Sunday" for the metropolis; seeing that "the London" would be justly entitled to a very large share of the proceeds.

THE Local Government Board, recently constituted in England, is about to have an imitator in Germany. Great efforts are being made in the empire to institute some such central sanitary authority; while Prince Bismark has himself taken up the matter, and proposes to the Federal Council to appoint a Sanitary Committee of the Empire. The committee will prepare the measures requisite for the enactment of the contemplated board.

SIR J. RANALD MARTIN, C.B., will preside at the annual dinner of the medical officers of the Army, Navy, and Indian Services on the 30th inst., at the Freemasons' Tavern; the announcement of which will be found in our advertising columns.

WELLINGTON in New Zealand has been heavily visited by small-pox, brought with the first instalment of immigrants by the *England* early in March. The vessel had on board seventy Scandinavians, and came in flying the yellow flag, with the report that several deaths had occurred on the voyage, and that much sickness still prevailed among the passengers and crew. Every precaution was at once taken to arrest the progress of the disease on board, and to prevent its spreading on shore. This is the second time within the last two years that an immigrant ship has imported small-pox into Wellington; and we hope that such care will be taken at the point of departure here as to prevent its recurrence.

SINCE the cession of Alsace the French have discussed the propriety of choosing a large provincial centre to found a faculty of medicine, in the place of the institution formerly existing at Strasburg. The towns which have been mentioned are Lyons, Marseilles, and Toulouse. We now find that M. Fourcaud, a representative, has brought before the Assembly a bill proposing to select Bordeaux. The proposal has been signed by many deputies belonging to the localities surrounding Bordeaux.

THE anniversary festival of University College Hospital was held on Thursday, the 9th inst., at Willis's Rooms, Prince Arthur in the chair. In proposing the toast of the evening—"Prosperity to the Hospital,"—the Royal chairman stated that, since its foundation in 1833, 47,000 in-patients had been treated, and more than ten times that number of out-patients had received relief; and, in concluding, made an earnest appeal for funds, which, we are glad to say, was liberally responded to in the course of the evening.

ADELAIDE (South Australia) seems exercised with sanitary difficulties not unlike our own. The Drainage Committee of the City Council has published its evidence. Much difference of opinion appears to prevail as to the merits of surface or deep drainage, but none whatever as to the fact that Adelaide has to thank the singular salubrity of her climate and not herself for her exemption from epidemic disease.

IN the recent quarterly return of births and deaths in Nottinghamshire the mortality appeared to be considerably above the average rate, no less than 383 deaths being recorded from small-pox. These facts should stimulate sanitarians in that county to increased exertions.

LATE advices from Constantinople state that cases of cholera, of a mild form, have occurred in the Hedjaz and in Yemen, but that no cases had occurred amongst the pilgrims, who have been compelled to perform quarantine at El Wedj.

THE Committee of the Infirmary for Epilepsy and Paralysis have secured a noble house with grounds in Portland-terrace, Regent's-park, and expect to get the alterations completed and the new premises opened by June 1st.

ON Monday last the Pope celebrated his eightieth birthday. In spite of troubles, Pius IX. is reported to be in excellent health.

THE French Government have lately proposed to add to the budget of 1871 £170,000, and to the budget of 1872 £60,000, for the expenses incidental to the cattle-plague.

THE Government of India has determined to extend the cultivation of opium in the Punjaub.

THE twentieth annual meeting of the Governors of the Children's Hospital, Great Ormond-street, was held on Wednesday; the Hon. A. Kinnaird, M.P., in the chair. During the meeting it was stated that an anonymous donor had presented the committee with £1000, for the purpose of fitting up a chapel in the new hospital.

THE following members of the medical profession attended the recent Levée:—Drs. Bate, Cape, Francis Hawkins, Morell-Mackenzie, Miller, Oppert, Owen Rees, Chunder Roy, Saunders; Deputy Inspector-General Ivey, and Mr. Jackson.

IT is satisfactory to find that the Kensington Vestry appreciates the services of an energetic officer of health. They have spontaneously raised Dr. Dudfield's salary from £200 to £300 per annum.

WE hear that large numbers of famished Persians are making their way into Bagdad and its neighbouring localities, and are seeking help from the Turkish authorities.

Surgeon-General Stromeyer, of the German Army, will this week renew his acquaintance with London, after an absence of twenty-five years.

CHOLERA, which had greatly subsided in Jounpore, India, is now said to be raging violently, 300 deaths a day being recorded.

AMONG the amendments to the Public Health Bill is one framed with the object of stopping the "buzzer" nuisance.

Public Health.

THE QUARTERLY RETURN OF THE REGISTRAR-GENERAL.

This return gives an average mortality for the whole of England during the first three months (winter quarter) of the present year at the rate of 23·5 deaths annually to every 1000 of the population, or nearly 2 per 1000 less than the ten years' average for the season. This is accounted for in the following characteristic sentence:—"The frosts of the last months of 1871 had proved fatal to many old people, who, like the leaves of autumn, are easily shed; and the survivors enjoyed the mild and exceptional winter that followed, so several thousands of them are alive who must have succumbed had the winter been severe." The mean temperature for the quarter was 5° above the average of 101 years, and only once—namely, in 1846—during that long period has the warmth of this year's winter been equalled. The difference between the effect of warm and cold winters upon the death-rate is apparent from the fact that in the ten years 1862-71 the temperature of the three coldest winters averaged 37·5° and the annual death-rate 27 per 1000; while in the three warmest winters the mean temperature was 41·1°, and the average death-rate did not exceed 24 per 1000. Small-pox was more fatal than in any previous quarter since the present epidemic began in 1870, the disease having spread to other localities as it declined in London and the places in which it first appeared. In Wales the fatal cases rose to 900 last quarter from 539 and 141 in the two quarters preceding; the counties of Monmouth and Glamorgan account for 754 out of the 900, so that there were only 146 throughout the rest of the principality. Scarlet fever was less destructive than it had been in any recent quarter, and the same may be said of fever. Whooping-cough was exceptionally fatal, mostly in the largest towns.

PUBLIC DRAINAGE WORKS AT BRUSSELS.

A recent number of *Engineering* contains an interesting description of the new sewerage works at Brussels. These works are somewhat similar to those which have been carried out in London, though on a smaller scale. The river Senne has been completely arched over in its course through the city, and a splendid boulevard has been erected over it. Formerly the river was little better than an open sewer, and to make way for the new works 1200 families have been removed from unwholesome and overcrowded dwellings to more open districts, where it is proposed to erect for them a better class of buildings.

Birmingham.—The Sewerage Bill has got through the Parliamentary Committee to the extent of the acceptance of the preamble. Some very objectionable restrictions have been insisted upon—as, for example, a proviso that no sewage shall be put upon any lands without having been previously deposited in covered tanks. We very much doubt if this is either desirable or practicable in all cases.

Leeds.—The A. B. C. process has been given up at Leeds. The tanks have not proved suitable, and the effluent water did not remain pure after standing. The Phosphate Manure Company have now made an offer to pay £1000 a year for the entire sewage on condition that the corporation provide more land. A resolution to purchase twenty-five acres was passed, and we presume the phosphate process will have a fair trial.

Leicester.—Dr. Crane's report for 1871 shows a decline of mortality, the annual rate having been 25·84 in 1871 as against 27·37 in 1870. One-ninth of the deaths were certified by unqualified persons. The first death from small-pox occurred in May, and Dr. Crane is of opinion that the disease might have been stamped out but for the opposition which was manifested to the removal of patients to the hospital. Dr. Crane is of opinion that the prejudices against vaccination have been growing in the town, and he devotes some space to reiterating arguments in favour of its protective influence. There was a still further increase in the mortality from diarrhœa, and Dr. Crane instituted a house-to-house visitation with the object of further explaining its origin. The number of deaths from diarrhœa was 240, and of these 182 were reported on; 75 deaths occurred in houses supplied with water from wells, of which the total number was 5589, whilst 105 occurred in houses supplied from waterworks, of which there were 14,240. There was an excess of diarrhœa in houses supplied from wells in the proportion of 13·4 to 7·5. Of the 182 cases, 123 occurred in houses having privies and cesspools, and 59 in houses having watercloseta. As the number of houses was the same under both conditions, it follows that diarrhœa was twice as fatal in those with privies and cesspools. Of the 182 houses, 163 had no distinct connexion with the sewers, so that it is pretty clear that diarrhœa was not caused by the entry of sewer gases. This evidence is strongly in favour of a public water-supply and the adoption of watercloseta, and should lead the sanitary authorities to urge their substitution for the stinking and unwholesome privies. For fifteen years there has been a steady yearly increase in the number of deaths from atrophy and debility. In 1866 there were 89; in 1871, 255. This points to the conclusion that the vigour of the infantile population is undergoing progressive deterioration.

Salford.—Mr. Syson reports that Salford has stepped backward in the sanitary scale. Small-pox proved exceptionally fatal, and one death occurred from a second attack. Salford lost more of her population from preventable causes than any large town, save Sunderland, Newcastle, and Liverpool. The annual rate of mortality was 30·4 per 1000. Mr. Syson says that much of this is of local origin, and that it is awful to contemplate the heaps of putrescent matters at the very doors of the houses, and the pollution of the soil and air with excrementitious matter. The abolition of middens appears only to be in contemplation.

Wigan.—Mr. Rawlinson has recently paid a well-deserved compliment to the corporation of Wigan for their excellent arrangements for supplying the town with water. The supply is constant, and the source unfailing. Cottages are charged 2d. per week only, notwithstanding that the consumption may be 700 gallons per week in the case of a large family. The town is situated over coal mines, and the water mains are liable to injury by subsidence. Notwithstanding these drawbacks, the total average consumption does not exceed 15 gallons per head per day, or less than half that of London.

Wolverhampton.—The sanitary committee have asked for an additional sum of £1650 for sanitary requirements.

They propose to erect a hospital, disinfecting apparatus, and public mortuary, and to have the water-supply of the town and that of private wells analysed monthly, or as often as may be thought necessary.

Correspondence.

"Audi alteram partem."

LONDON HOSPITAL.

To the Editor of THE LANCET.

SIR,—The statements made in your article of the 11th of May, respecting the recent inquiry at the London Hospital, are at variance with the facts. The verdict you pronounce upon the case and upon the conduct of those concerned, based as it is upon *ex parte*, imperfect, and untrue evidence, is necessarily valueless. You assert that "the senior surgeon to the hospital was present at the operation, and he not only saw nothing to condemn, but, by his public and emphatic testimony in Mr. Rivington's favour before the Quarterly Court, he obtained from that body a decision in conformity with the justice of the case."

Your readers are by this statement given to understand that you are acquainted with what transpired at the Court of Inquiry, and with its decision. Will you or will Mr. Rivington, by publishing that decision in precise terms and all the facts, give your readers a fair opportunity of judging for themselves? I challenge him and you to this issue. I am ready and anxious to submit the whole matter to a court of arbitration, before which all the facts can be brought. The case, as it at present stands, is not one which even THE LANCET is competent to judge.

I am, Sir,

C. F. MAUNDER,
Surgeon to the London Hospital.

May 13th, 1872.

To the Editor of THE LANCET.

SIR,—Your editorial comments on Mr. Maunder's letter so effectually annihilate his feeble defence that I refrain from following him through many irrelevant details about meetings of the staff, introduced, apparently, to create a favourable impression of his conciliatory disposition, in contrast to my own contumacy. Nor will I comment on the extraordinary assertion that he acted entirely in my interest in any single step which he took throughout the late painful transactions, or at any time during my hospital career. It is impossible, however, not to point out the obliquity of moral and professional vision involved in his statement that a "private inquiry" into my competency, of which I was kept in total ignorance, "made in the presence of three members of the House Committee," with whom Mr. Maunder knew that I was temporarily unpopular on account of my official relations as Dean of the School, and with one of whom Mr. Maunder was on terms of convivial intimacy, "and two of the senior members of the staff, one of whom was a consulting officer and Mr. Rivington's relative" (a-very-impartial-first-cousin-once-removed), both of whom Mr. Maunder had studiously endeavoured to prejudice against me, "does not savour of unfairness." Why does he not mention that the accusations were lodged secretly by him with the lay authorities, and that the accuser was careful to keep himself at first in the background, under cover of the lay authorities, but that when his presence was insisted on, he came forward with a written indictment against me which had no evidence to support it but his own testimony, and which, as you stated with substantial accuracy, "utterly broke down"? If Mr. Maunder wishes to act fairly by me let him even now send me a copy of that document, and I shall then be in a position to decide whether he has acted towards me conscientiously, and with a view to promote my interests and the interests of the Hospital. I can imagine how a document of the kind would be worded by an upright man, who was in all charity endeavouring to reclaim an erring brother to the sense of his responsibilities and duties. Here is a great opportunity for him to show me his righteous dealing.

For the rest it is sufficient for me to state that, whilst deeply regretting and endeavouring as I hope to profit by my shortcomings and errors in the past, I could not agree to a compromise which was against my convictions, and would have placed me at a decided disadvantage in the future. Very willingly, however, did I accede to the resolution passed at the last meeting of the staff, that the question of Mr. Maunder's professional conduct in relation to my whole career should be submitted to the arbitration of three eminent surgeons, and I stated that, in my opinion, the judgment of the arbitrators should be accepted even if they recommended, in the interests of the hospital and school, that one or both of us should resign. This resolution of the staff Mr. Maunder has declined to accept.

I am, Sir, yours, &c.,

WALTER RIVINGTON, M.S. Lond.,
Surgeon to the London Hospital.

May, 1872.

MECHANICAL RESTRAINT IN CASES OF INSANITY.

To the Editor of THE LANCET.

SIR,—In THE LANCET of May 4th you quote from my last annual report some remarks concerning restraint, which seem to you inconsistent with the laudatory extract from the Report of the Lunacy Commissioners; and in your comments thereupon you question the justice of their opinion and the propriety of my treatment. I might well rest satisfied with the approval of the Commissioners; but I have no wish thus to shield myself from criticism, and therefore reply to your remarks with pleasure.

The quotation states that "restraint has been used more frequently than in previous years." Lest this be misunderstood, let me explain that in 1871, with an average number of 428 patients, restraint was used, generally for very short periods, in three cases for surgical reasons, in two cases for determined suicidal attempts, and in three cases for wholesale destruction of bedding. Even this degree of frequency was so unusual as to call for special notice in the annual report.

I must also ask you to complete the extract from my report by the following sentences, which you omitted to give last week:—"I never hesitate to use restraint when other means fail, if I think it for the patient's good. The cases requiring it are very rare, but it is as certainly right to use it when required as it is wrong to use it when unnecessary. To condemn restraint under all circumstances, merely because it has been, or might yet be, abused, is as unreasonable as to forbid all use of stimulants because they have been, or may yet be, used too freely."

I know there are some who utterly condemn restraint, and everything that resembles it, under all possible circumstances, and who avow that they would *never* use it even if they thought it advisable in any individual case. I think this a false position, founded on an erroneous and unworthy view of the system which it professes to uphold.

The noble revolution which Dr. Conolly was chiefly instrumental in effecting did not consist merely in the removal of leg-locks and strait waistcoats; it consisted in the introduction of totally new ideas as to the insane, and a totally new method of dealing with them—in the substitution of kindness, sympathy, and skilful treatment for harshness, severity, and neglect, and in making the welfare of the patient the constant and paramount aim. This, of course, implied the abolition of all personal restraint to the utmost possible extent consistent with his welfare, *but no further*. So long as personal freedom is the best thing for the patient it is *right*, when it is not the best thing for the patient it is *wrong*. There is a mistaken tendency to regard "non-restraint" as something in itself of mysterious virtue and vital importance, as a kind of sacred rule never, under any circumstances, to be violated; its only true ground and its absolute limit is the good of the individual patient.

Restraint was used last year in this asylum, generally in the form of gloves, in the three classes of cases already mentioned.

In surgical cases I suppose no one will question its propriety when rest and non-interference cannot otherwise be secured.

For determined suicidal attempts it was used in the case of two women. The one was continually attempting to compress her throat, and succeeded in thus producing hoarseness and ecchymosis of the conjunctiva; the other constantly tried to hammer her head and face on the floor or walls, and to tear out her eyes. The vigilance of attendants, however constant and well directed, is not sufficient to ensure the patient's safety in cases like these. This was lamentably demonstrated in a similar case which occurred elsewhere, where the patient, in spite of the continual care by night and day of two attendants, gouged out both his eyes.

For wholesale destruction of bedding, restraint was used in three cases, one male general paralytic, and two female imbeciles. The man was, perhaps, the most destructive patient I have ever seen; every kind of fabric was torn to pieces and every kind of bedding destroyed with a persistency and completeness almost incredible. When the ordinary means, occupation, amusement, vigilance, and sedatives all fail in such cases—and I know that they all *do* fail sometimes—what is to be done? Must the patient be allowed night after night, without the smallest benefit to himself, to destroy valuable property, and is the nightly collection of rags a thing to be proud of? I make such a patient wear gloves at night, which in no way interfere with his movements, which greatly limit and often correct his destructive habits, and which give a chance of sleep when otherwise there would be none. Is there anything heinous in this if looked at in the light of common sense, and apart from a blind reverence for the mere name of non-restraint?

Similar extreme views are sometimes held as to seclusion, but, as with restraint, the good of the individual patient should be the rule and limit of its use. Here it is used very rarely, only in six cases last year, but I am certain that where the violence is so great as to render personal control indispensable, it is wiser to leave the patient in his room for a time than to expose him to the irritation, excitement, and risk of being held by attendants, however numerous or experienced.

The indiscriminate use of restraint or seclusion cannot be too strongly condemned, but to abjure them under all circumstances is only another illustration of the proverb that the extreme of right is wrong. The undue use of "chemical restraint," or other means of repression, would be an evil substitute for their occasional use; and to demand from attendants vigilance that shall never flag, and patience that shall never tire, is to expect more than man can render.

In conclusion, I may say that these views are not at all singular, as you seem to think; they are held by many of our best asylum superintendents, and, apologising for the length of my letter, I thank you for the opportunity of thus expressing them.

I am, Sir, your obedient servant,

D. YELLOWLEES, M.D.,
Medical Superintendent.

May, 1872.

*** Our correspondent's letter seems to show a sad want of appreciation of the fundamental principle of the non-restraint system. The infliction of mechanical restraint demoralises those who use it and those who suffer it; giving rise, in the long run, to negligence and brutality in the former, and to dirty habits, noise, and excitement in the latter. We are quite sure that Dr. Conolly, were he living, would earnestly repudiate the interpretation which Dr. Yellowlees puts upon the revolution which he effected, and that he would see in Dr. Yellowlees's practice a confirmation of his worst fears, that the old system, with all its horrors, would, after a time, be brought back gradually. Dr. Yellowlees may act with discretion and judgment, but the argument which he employs would support the use of every possible form of mechanical restraint on the part of those who, to save trouble or expense, might choose to think it necessary. If our best asylum superintendents really endorse Dr. Yellowlees's views we shall be surprised; we had thought that there was scarcely an English county asylum in which there was a single instrument of mechanical restraint.—ED. L.

ANOTHER TATTOOED MAN.

To the Editor of THE LANCET.

SIR,—In THE LANCET of February 3rd there is an account of the tattooed man of Vienna. In the year 1861, when at Rivière du Loup, Canada, I had the fortune to meet with much such another person. This man's name was Chambers; he had been lieutenant and adjutant of the 49th Regt. (he showed me his commission). I was two days at the same hotel with him, during which time he kindly stripped himself for my inspection. He was a tall thin man, about fifty-two years old; grey hair; the whole of right side of face covered with strawberry stain. Commencing with a collar round the neck, and terminating at the wrists and middle of calf of legs with a most elaborate piece of embroidery, the whole of the body inclusive was one mass of tattooing. The main figures consisted of Birmhese gods and goddesses, the intermediate spaces filled in with Birmhese inscriptions, birds, beasts, fishes, and scrolls. There was not the space of a pin's-point left uncoloured, which was in red, black, and blue. Mr. Chambers' account of the matter is simply the following:—That when stationed with his regiment in Birmah (I have forgotten the year he said) many years ago, he, for the curiosity of the thing, had himself tattooed in this manner; the amount he paid the man who ornamented him was £40 sterling. He also said that it was a very common thing amongst the natives, and Europeans frequently commenced the beautification but generally got tired of the pain before the affair was finished.

When at Quebec, last year, I asked if he was still alive, but was informed that he had died. This poor man had for many years earned a living by travelling the world over, blowing a penny whistle, and playing the concertina, which he did in a wonderful manner. He was not in the habit of exhibiting his tattooing, and it was only my being a military medical officer, and talking to him, that made him show himself to me; he seemed rather ashamed of his youthful freak. May not the Vienna man in all probability have been tattooed also in Birmah?

I am, Sir, yours, &c.,

Brockville, Ontario. G. E. GASCOIGNE, M.D., late R.A.

THE WORCESTER INFIRMARY.

To the Editor of THE LANCET.

SIR,—Your impression of Saturday last (4th instant) contains an article reflecting upon the Worcester Infirmary and its honorary staff, professedly founded upon an anonymous letter in a local newspaper. As the article in question contains several errors, both as to facts and as to the inferences you have drawn from them, we trust you will do us the justice of inserting this correction in your next issue.

It is stated, in the first place, that there are but two physicians to the infirmary, that the committee have not filled up *vacancies* as they occur, and that this state of things is "*detrimental both to the profession and to the public.*" Now, with reference to the latter clause, the simple facts are these:—The Worcester Infirmary contains 100 beds. The proportion of these usually occupied by medical and surgical cases respectively is 40 to 60; the actual number of cases under the care of the physicians ranging between 25 and 35. The out-patients are under the care of, and are regularly seen twice a week by, the members of the staff themselves.

Until the last few weeks the number of physicians and surgeons on the staff was three of each. Statistics will inform you that this is a larger proportional number than is enjoyed, with one exception, by any other hospital of the same size in the kingdom. The average number of physicians to 100 beds is something less than two, of surgeons less than three; whilst in larger hospitals the proportion of the staff to beds is still less. So much for any detriment to the interests of the public. In the interest of the profession, it is implied that there are, or may be, two physicians in Worcester who are excluded from the advantages of the practice of the infirmary. The facts again are these:—There are two, and only two, graduates in medicine in this city who do not hold office in the infirmary. One of these declines to become a candidate for the single vacancy that

has just occurred; and the application of the other was not entertained by the committee. "*Hinc illæ lachrymæ*" of your possible correspondent. Then, as regards the rule of the infirmary, by which its physicians are restricted from general practice, whatever differences of opinion may prevail upon this subject, it has, at all events, the full concurrence of the Executive Committee, and, it is believed, of the whole medical profession of the city and county.

Turning now to the surgical side, the first allegation is that the practitioners in Worcester are not even invited to witness the operations performed in the infirmary. Our answer to this is that, out of thirteen medical men practising in this city unconnected with the infirmary, *all*, with the exception of two, have been frequently present by invitation at the operations; and whenever there have been cases of unusual interest, such as ovariotomy, &c., members of the profession in the county have also been *invited*. Then, as to the second allegation, that the general body of practitioners in the city and county are *not free* to witness the operations, we beg to draw your attention to the following rule: "Gentlemen of the profession in the city of Worcester and neighbourhood may be admitted by the honorary surgeons to witness the operations at the infirmary, with the concurrence of the operating surgeon." This surely affords every facility for witnessing the operations by all our medical brethren, especially as there is a fixed day and hour for the purpose; and it has always given us pleasure to see them present.

We trust that you will now see that there is no "mystery or secrecy" in the surgical management of the infirmary, and that we do not "conceal our lights beneath the bushel of exclusiveness and clique."

We are, Sir, your obedient servants,

WILLIAM STRANGE, M.D., Senior Physician to the Infirmary.
HERBERT W. BUDD, Senior Surgeon.
} On behalf of the Honorary Staff.

May, 1872.

*** It strikes us with a sense of pain, as bearing upon the status and habits of the Worcester staff, that our correspondents appear to be unaccustomed to hold communication with gentlemen. We stated plainly what our article was founded upon; and the inuendo contained in the words "professedly founded," and in the words "your possible correspondent," is an impertinence that we need not find an adjective to characterise. The substance of our correspondents' letter absolutely proves our case step by step, except in one particular. Dr. Strange and Mr. Budd assert that there were never more than three physicians. "Charity" asserted that there were originally four. Between the conflicting statements we must leave local antiquaries to decide. Our argument as to what ought to be is left wholly untouched; and no amount of mismanagement on the part of the Executive Committee, or of analogous mismanagement at other places, can convert wrong into right. "The Medical Directory" contains the names of seven graduates in medicine (two M.B.s and five M.D.s) as practising in Worcester. Three of these only, omitting Dr. Williams, are connected with the Infirmary, one as consulting, the others as acting physicians. There are, therefore, at least three gentlemen, and not two only, who might be eligible for office. As regards surgery, the letter proves our point still more completely. We stated or implied that medical practitioners, as such, ought to feel themselves at full liberty to go and witness operations without invitation; that the hospital was a public institution in no way the property of its medical staff; and that its doors ought to stand open to the profession at all reasonable times. We are told in reply that out of thirteen practitioners (why thirteen, when there are twenty-seven in the "Directory?") all but two have been frequently present "by invitation" at the operations. We say that the eleven should have needed no invitation, and that the two should have needed it as little. We are referred to a rule which says that "gentlemen of the profession *may* be admitted by the honorary surgeons, with the concurrence of the operating surgeon"; and we say that the rule is preposterous, besides being radically vicious and unsound in principle. The honorary surgeons are representative men, discharging a trust, and the profession has a right to be admitted, not by them, or with their concurrence, but by the governors, to see how they discharge it. The fact is, that the old battle which THE LANCET fought forty years ago, in the case of London hospitals, has to be fought over again in provincial towns; and that the evils are there in many cases rampant, which in the metropolis the light of publicity has dispelled.—ED. L.

THE RICHMOND INFIRMARY.

To the Editor of THE LANCET.

SIR,—When the Richmond Infirmary was established some few years ago, a somewhat peculiar rule was made, that no person should be eligible for the post of medical officer "until after three years' residence in the town." This, at that time, excluded myself and others. Last week a new appointment was created, that of "medical attendant to see out-patients at the infirmary." Amongst the candidates for that office were Dr. Fenn, who, within the last year, has become a partner in what formerly was, and possibly is now, one of the leading practices of the place, and myself. Finding the interest for this gentleman so great, doubtless through the great influence of his well-known predecessor and that of his present partner, I saw no other alternative but, at the last moment, to resign. What I would wish to ask is this, What chance has a man, striving by himself, of ever hoping to obtain an office in the Richmond Infirmary against a gentleman backed up at once by the great interest of an influential predecessor, and whose present partner is not only a governor of the infirmary—doubtless attending several, if not many of the governors,—but is also medical officer to in-patients? Secondly (and here lies the peculiarity of the case), the successful candidate has not been in Richmond one year. If a rule was made at the establishment of the infirmary that "no person shall be eligible until after three years' residence in the town," which at that time excluded myself and others, how comes it that Dr. Fenn, of all others, is elected upon the present occasion?

I beg to remain, Sir, your obedient servant,

JOHN WINNALL GEORGE, M.R.C.S.

Richmond, Surrey, May 8th, 1872.

THE DIAGNOSIS OF SMALL-POX.

To the Editor of THE LANCET.

SIR,—Your remarks in last week's annotations on the necessity of medical men exercising great care in forming a correct diagnosis before consigning patients to a fever hospital, apply, especially at the present time, to cases of small-pox. Out of 180 of these lately sent to the hospital with which I am connected, 16 proved to be not small-pox at all. They were all of course carefully revaccinated as soon as the error was discovered, but, at periods varying from ten to fourteen days after admission, 4 developed the disease, and one of these died.

I am, Sir, your obedient servant,

May 13th, 1872. A MEDICAL OFFICER.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

AT the last meeting of the Manchester Medical Society, Dr. Leech showed a most instructive case of paralysis of the portio dura and the fifth nerves, occurring in a man under his care at the Chorlton Union Hospital. Mr. Whitehead showed a number of interesting cases in surgery, including the following:—A woman, from whom he had removed the half of the lower jaw for fibro-plastic tumour; a case in

which the parietal bone had been removed *en masse* for syphilitic disease; a child, the shaft of whose humerus had been removed on account of extensive necrosis; and a case of excision of the elbow-joint, which well illustrated the advantages of conservative surgery, there being free movement in every direction. Dr. Hardie showed a case of tumour of the dorsal region in a child aged four and a half months, which he considered analogous to the form of congenital cystic tumour not unfrequently met with in the neck. Some of the members, however, inclined to the opinion that it was of a malignant nature. Dr. Hardie also showed a typical specimen of cancer of the furmur. Mr. Westmorland exhibited a penis weighing 1 lb. 10 oz., which he had amputated on account of the inconvenience occasioned by its size, due to the presence of wart-like growths, which were found on microscopic examination to contain abundance of proliferated epithelium elements. Dr. Lloyd Roberts showed an interesting specimen of double uterus and vagina, of the highest degree of division, taken from the body of a young female, in the practice of Dr. Leech. She died of epilepsy; and, in addition to other anomalies, was found to have a solitary kidney. Dr. Nesfield related some particulars of a case of digitalis-poisoning, which had occurred in his practice. Mr. Lund showed a No. 4 gum-elastic bougie, which a patient of his had been in the habit of passing himself for the relief of an old stricture, and which had slipped accidentally into the bladder. After it had remained in that situation for two or three days, Mr. Lund's aid was summoned. He first dilated the urethra by Holt's method, and then removed the bougie by means of a lithotrite. The business of the meeting was completed by the reading of the concluding portion of Dr. Ransome's paper, on the Respiratory Movements, by the honorary secretary, who had unfortunately to read it to nearly empty benches. This ought not to take place. If the author had been present, doubtless an interesting discussion might have followed on this, the practical portion of his paper. Would it not be better to postpone the reading of a paper in the absence of its author?

The arrangements for the amalgamation of the Royal School of Medicine with Owens College are now completed; and after the 1st of August the school will become "the medical department" of the College. Miss Brakenbury, of Brighton, recently gave a donation of £10,000 to the funds of the College, £5000 being towards the building of the medical portion, and £5000 for the endowment of a medical chair. But it was found that about £5000 more would be required for the building, and a like additional sum for the endowment of the School. Accordingly, a meeting was held in the College Library last Friday, to form a committee for the purpose of raising the necessary funds, at which, among others, I noticed Drs. Sir J. L. Bardsley, Wilkinson, Morgan, Lloyd Roberts, Leech, and Hardie, and Messrs. Turner, Mellor, Lund, Bradley, Southam, and Smith. At the conclusion of the meeting the chairman (Mr. Murray Gladstone) announced that £1750 had already been subscribed towards this desirable object.

May 3rd, 1872.

Obituary.

EDWARD LLOYD HARRIES FOX, M.D., M.S. LOND.

(OF BROUGHTON, HANTS.)

IT is our sad duty to record the death, at a comparatively early age, of a member of our profession (Edward Lloyd Harries Fox) whose college and university career led those who were best able to form an opinion to anticipate for him the attainment of high distinction among his fellows, should his health permit him to follow up the study of his profession, which he had commenced with so much earnestness and success. During his student life, however, and at the post of duty, he was seized with a pyrexial attack, accompanied by a certain amount of sore-throat, which appeared to be scarlatinal, but was not clearly proved to be such, and this was followed by a severe attack of hæmaturia, which occasionally recurred. This pyrexial attack unquestionably sowed the seeds of the organic disease which has but just carried him to an untimely grave.

The deceased was the son of a well-known member of the profession, Dr. L. Owen Fox, of Broughton, who occupies a prominent position amongst our professional brethren in South Hants, and from under whose roof several sons and pupils have been sent to recruit our ranks. He was educated first under Richard Dawes (afterwards Dean of Hereford) at Kingsomborne, and thereafter at Queenwood College, at which place he was a pupil of Tyndall and Debus, and from the latter he acquired the basis of that knowledge of chemistry which made him the medalist of his class in chemistry at University College subsequently. He entered at University College soon after leaving Queenwood, and was noted from the first as a steady and persevering worker, possessed of remarkable application, and peculiarly methodical. It is said by those who knew him best that he scarcely, if ever, in his reading, dismissed a page of matter without having first mastered the meaning of its contents, and put the gist of the matter on paper in his own language. To this practice may be, in part, attributed the excellence of his memory, and the preciseness of his statement of facts. At the College, where he was a great favourite, and won the respect of the Professors, he did not take any other medal than that for Practical Chemistry, but the success and character of his work at all subjects was evidenced subsequently and abundantly in the examinations at the University of London. At the first M.B. he gained the gold medal in Materia Medica, and at the second M.B. two scholarships and two gold medals at the same examinations—viz., the scholarship and gold medal in Midwifery, and the scholarship and gold medal in Forensic Medicine, with honours in Medicine; and the applause which greeted him on receiving from the hands of the Chancellor (Lord Granville) these well-earned honours was a just tribute to his merits. Subsequently he took the M.D. and the Mastership in Surgery. His friend, Marcus Beck, stood first in the honours' list, and he and Howse, of Guy's, who had tied Beck at the B.S. honours, were both placed as having qualified by marks for the medal.

The distinction he gained at the University of London led the Council of University College to confer upon Edward Fox the honour of making him a Fellow of the College. About this time the post of resident medical officer to the University College Hospital became vacant, and it was hoped that he would have taken the appointment with a view to enter upon a London career. He, however, declined the overtures made to him, and, choosing a country life, joined his father in practice, though too well knowing a fact which he concealed from himself as much as possible, that his life would at best be not a long one, for occasionally albumen showed itself in the urine. Looking back over the last few years of his life, his friends can now understand his resolve. But with remarkable earnestness he seems to have devoted himself—in a not very commonly selected work—to a conscientious discharge of duty amongst the poor. This was characterised by the exhibition of remarkable patience and gentleness towards them and their foibles which won for him the respect and esteem not only of the poor, but of every class in his neighbourhood. And what he did was done unostentatiously. He still kept up his reading and working. Two years since he had rheumatic fever from cold, which pulled him down a great deal, but he fairly recovered. About three months ago all the symptoms of Bright's disease showed themselves, but Sir W. Jenner and others who saw him thought, with care and giving up all nightwork, he might pick up and live on several years. But he seems after this to have caught cold, with an alarming increase in all his symptoms—renal and cardiac; and after seven weeks of intense suffering, with occasional intervals of comparative comfort, borne with rare patience, he met his death with perfect resignation at the age of thirty.

His death has cast quite a gloom over the neighbourhood in which he lived. His short life speaks in eloquent terms to the student of the success which may be expected from having a definite object in view and pursuing it with steady application and work, as one of his old fellow-students, now a distinguished physician, wrote on hearing of his illness,—"If his career is brought to a close he has at least the satisfaction of knowing that it has been one not only of great credit to himself but of utility to others. I can point to at least one of his fellow-students who has derived large benefits from his advice and bright example, and

who feels that his own moderate success has been in no small degree owing to his having constantly before his eyes the practical end to be obtained by honest work." The self-abnegation, moreover, which he exhibited in the face of his own personal anxiety and the disappointment of all his just hopes ennobled the profession to which its owner belonged. The death of Edward Fox will not be regretted least by his old fellow-students and the College at which he studied.

GEORGE ODLING, M.R.C.S.

THIS gentleman died on the 26th ult. at Worthing, in his seventy-eighth year. He had for some years retired from practice and resided at Sydenham-road, Croydon. He was born at Tetney, in Lincolnshire, and was the seventh son of a substantial farmer. His medical studies were pursued at the Borough Hospitals, and in 1819 he took the licentiateship of the Apothecaries' Company, and in 1821 the diploma of the Royal College of Surgeons. He settled in practice in the Borough, where he long commanded a large *clientèle* by his promptitude, skill, and success. He was appointed surgeon to the M Division of the Metropolitan Police on the establishment of that force, and held the post until his retirement in 1858, as well as that of surgeon to the Licensed Victuallers' School at Kennington. His robust health was unbroken till a few months ago, when disease of the heart declared itself. He leaves a widow and two children: a married daughter, and a son, MR. WILLIAM ODLING, M.B. Lond., F.R.S. &c., the Fullerian Professor of Chemistry at the Royal Institution, Examiner in Chemistry to University College, London, and now candidate for the Waynflete professorship at Oxford.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College at meetings of the Court of Examiners on Tuesday and Wednesday last:—

Berry, Dennis, Barnard Castle.
Bishop, Sydney Olive, Sandhurst, Berks.
Bowman, George, M.B. Edin., Manchester.
Bralley, William Arthur, M.B. Cantab., Cambridge.
Carey, Richard John, L.S.A., Northampton.
Clarke, John Teasdale, Newcastle-upon-Tyne.
Cole, George Martin, Westbourne-villas.
Cooke, John, Hoxton-street.
Dawes, Richard St. Mark, Mornington-road.
Deakin, Charles W. S., Hereford.
Ellis, Hyacinth D'Arcy, Tipton, Staffordshire.
Evans, Lawford David, L.R.C.P. Edin., Bathin, North Wales.
Graham, George, L.R.C.P. Edin., Winchester.
Green, James, Bolton, Lancashire.
Grogono, Walter Atkins, L.S.A., Stratford, Essex.
Harries, Thos. David, L.R.C.P. Lond. Llancast, Pembrokeshire.
James, Cyrus, L.S.A., Highworth, Wilts.
Jones, Owen Thomas, Bangor, North Wales.
Kelly, William, Liverpool.
Miller, John Alexander, Great Percy-street.
Morris, John Henry, Burslem, Staffordshire.
M'Oscar, John, M.D. St. Andrews, Argyll-street.
Odling, Tom Francis, Buslingthorpe, Lincolnshire.
Orwin, Arthur Wigelsworth, Granville-terrace.
Paterson, Robert Haldane, L.R.C.P. Edin., Brigg, Lincolnshire.
Perkins, Whitfield, L.S.A., Camberwell.
Price, Edwin, Dudley, Staffordshire.
Roose, Edward C. R., L.R.C.P. & L.R.C.S. Edin., Brighton.
Steele, Sidney Thomas, L.R.C.P. Edin., Bath.
Tatum, Herbert Thomas, Twickenham.
Williams, Leonard, Victoria-square.

Seventeen other candidates were examined on the above days, but failed to satisfy the Court, and were referred to their professional studies for a period of six months.

The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Court of Examiners on the 7th, 8th, and 9th inst.:—

A. S. L. Newington, Cambridge and University College; J. Clare, T. C. Jones, H. M. Powell, and R. J. Morton, Guy's Hospital; E. H. Landon, A. C. Haden, G. H. Ross, and R. J. Price, University College; C. H. Tamplin, St. George's Hospital; F. W. Darker, H. Parson, and C. E. Priestley, St. Thomas's Hospital; P. French, Dublin; W. M. Worthington, Birmingham; A. L. Heale, Westminster Hospital; J. Scott, London Hospital; W. Smith, Sheffield and Glasgow; P. W. Hughes, Liverpool and Edinburgh; W. Smith, Manchester; E. Lee and A. T. Bacon, Leeds; M. B. Draper, London Hospital; W. E. Stevenson, T. A. Dixon, J. Nadin, J. Barrow, R. Powell, A. V. Landon, B. K. Howell, E. Haines, and W. l'Anson, St. Bartholomew's Hosp.; H. J. Hind, J. L. Treherne, H. F. Eastall, E. J. Hutchings, and E. T. Crouch, Guy's Hospital; C. E. Collins, University College; W. Sykes and A. A. Smith, Sheffield; L. F. Roe, J. A. Dearden, and J. Hutchinson, Manchester; G. P. Richards, Dublin; B. W. Fowler, St. George's Hospital; J. V. Farfan, St. George's Hospital and Edinburgh; L. J. Hughes, Dublin; K. S. Wallis, G. G. Tatham, J. J. Byrne, A. Kershaw, and A. W. Dacley, Manchester; G. E. Moore, King's College; W. Smith, Liverpool; W. L. Emmerson, Newcastle and Westminster Hospital; J. B. Hoffmeister, St. Bartholomew's Hospital; J. P. Smith, St. Mary's Hospital; C. F. Garrett, Birmingham and Edinburgh.

Of the 98 candidates examined on the 7th, 8th, and 9th inst., 40 failed to satisfy the Court, and were referred to their anatomical and physiological studies for the usual period of three months.

For the primary examination for the Fellowship of the College, which commenced on the 17th, there are about sixty candidates.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 9th inst.:—

Aubrey, Richard, Weston-super-Mare.
Lewis, Frederick William, Llandovery, Carmarthen.
Pritchard, Robert Clement, Puckeridge, Herts.
Saer, David Protheroe, Pembroke Dock.
Walker, William Newman, Tollington-park.

As Assistant in Compounding and Dispensing Medicines:—

Dismorr, Henry, Gravesend, Kent.

On the same day the following gentlemen passed their First Professional Examination:—

Alex. John Willcocks, Guy's Hosp.; Geo. Wm. Young, London Hosp.

THE Professors of University College will hold a conversazione on Wednesday evening, June 5th.

AN English lady lately visited the Edinburgh Royal Hospital for Sick Children, and, on leaving, presented the institution with £100, besides expensive toys for the little patients.

AT a meeting of the Commission of Sewers held on Tuesday, it was reported that during the preceding fortnight 4333 lb. of meat had been seized in the markets and slaughter-houses of the City, and destroyed as unfit for human food.

Medical Appointments.

ATKINSON, W. M., L.S.A.L., has been appointed Resident Obstetrical Officer to Charing-cross Hospital, vice F. D. Pitt, whose term of office has expired.

BOYLE, A. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Hutton District of the Stokesley Union, Yorkshire, vice E. J. Wilson, L.S.A.L., deceased.

CAMPBELL, W., M.B., C.M., has been appointed Joint House-Surgeon to the Royal Infirmary, Dundee, vice D. S. Moon, L.R.C.P.Ed., L.R.C.S.Ed., resigned.

CARTER, A. E., L.R.C.P.Ed., L.M., L.R.C.S.I., has been appointed Medical Officer for the Southern Division of the Liverpool Police Sick Fund, vice T. Bickerton, F.R.C.S.Ed., deceased.

COOMBER, F., M.R.C.S.E., has been appointed Medical Officer for the Raynham District of the Walsingham Union, Norfolk, vice Alfred Drew, M.R.C.S.E., deceased.

COURTENEY, E. M., M.B., M.C., A.B., has been appointed Assistant Medical Officer to the Derby County Asylum.

DE LA MOTTE, P. W., L.R.C.P., has been appointed House-Physician to Charing-cross Hospital, vice Mr. Savory, appointed House-Surgeon.

EAGER, T. C., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Woking District of the Guildford Union, vice H. Tofts, M.D., M.R.C.S.E., deceased.

EASBY, W., L.R.C.P.Ed., L.M., L.R.C.S.Ed., has been appointed Medical Officer for the Barton District of the Darlington Union, Durham.

FENN, E. L., M.B., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Attendant for Out-patients of the Infirmary, Richmond, Surrey, vice R. A. Warwick, M.D., M.R.C.S.E., resigned.

FORSHAW, T., L.R.C.P.Ed., has been appointed Medical Officer and Public Vaccinator for the Smalley District of the Belper Union, vice R. Bedes, M.R.C.S.E., deceased.

GREAVES, C. H., M.R.C.S.E., has been appointed a Surgeon to the Staffordshire General Infirmary, Stafford, and Medical Officer to the Stafford Union Workhouse, vice W. E. Maafen, M.B., M.R.C.S.E., deceased.

GREEN, C., M.R.C.S.E., has been appointed House-Surgeon to the West Bromwich District Hospital, vice T. Scoresby-Jackson, M.B., resigned.

JOYNAM, G. W., M.B., has been appointed an Hon. Surgeon to the Kidderminster Infirmary.

M'INNES, J., L.F.P. & S. Glas., has been appointed Medical Officer and Public Vaccinator for District No. 3 of the Barony Parish, Glasgow, vice J. Barns, L.F.P. & S. Glas., resigned.

MACKENZIE, D. J., M.B., C.M., has been appointed Assistant House-Surgeon to the Leith Hospital.

MAY, T. F., L.F.P. & S. Glas., has been appointed Medical Officer for District No. 7 of the Newcastle-upon-Tyne Union, vice Dalgliesh, appointed to District No. 6.

MILSOME, J. R., M.D., has been appointed Medical Officer for District No. 1 and the Workhouse of the Chertsey Union, vice T. A. Chaldecott, M.D., resigned.

PRITCHARD, U., M.D., L.R.C.P.L., has been appointed Demonstrator of Practical Physiology at King's College, London, vice D. Ferrier, M.D., resigned, on being appointed Professor of Forensic Medicine.

ROWLAND, Mr. G. C., has been appointed Secretary to the Infirmary, Richmond, Surrey, vice Warwick, resigned.
SAVORY, Mr. A. H., has been appointed House-Surgeon to Charing-cross Hospital, vice G. F. Slack, M.R.C.S.E., whose term of office has expired.
SQUIRE, S. N., M.R.C.S.E., has been appointed Medical Officer for the Elmstead District of the Tendring Union, Essex.
SWINSON, G. N., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for District No. 11 of the Newport Pagnell Union.
WHITMORE, W. B., M.B., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Workhouse and new Infirmary of the Parish of Kensington.

Births, Marriages, and Deaths.

BIRTHS.

BROOKES.—On the 12th inst., at Kennington-road, the wife of Robt. Chas. Brookes, M.R.C.S.E., of Westminster-bridge-road, of a daughter.
CARVER.—On the 11th inst., at Corpus-buildings, Cambridge, the wife of E. Carver, M.B., of a son.
KINGSFORD.—On the 11th inst., at Upper Clapton, the wife of C. D. Kingsford, M.D., of a son.
LEAKE.—On the 13th inst., at Sunnyside, St. Margaret's, Twickenham, the wife of Dr. J. B. Leake, half-pay 60th Regiment, of a daughter.
MILLAR.—On the 12th inst., at Belsize-park-gardens, the wife of S. S. Millar, M.D., of a daughter.
PALMER.—On the 11th inst., at Cambray, Cheltenham, the wife of T. W. Gascoigne Palmer, Esq., of a son.
WIGMORE.—On the 13th inst., at Inverness-road, Hyde-park West, the wife of W. Wigmore, M.R.C.S.E., of a daughter.

MARRIAGES.

FULLER—LANG.—On the 11th inst., at St. Michael's, Sittingbourne, James Mortimer Fuller, M.R.C.S.E., to Ella, daughter of the late Wm. Robt. Lang, Esq.
TUZO—COXHEAD.—On the 8th inst., at St. George's, Bloomsbury, Henry Atkinson Tuzo, M.D., late of Canada, to Laetitia, daughter of John Coxhead, Esq.

DEATHS.

CARRUTHERS.—On the 10th inst., J. Carruthers, M.R.C.S.E., of Finchley, aged 50.
COBBE.—On the 13th inst., C. Cobbe, M.R.C.S.E., of Nottingham-terrace, York-gate, aged 53.
DIRHAM.—On the 7th inst., Joseph J. A. Dirham, M.R.C.S.E., of Usher's Island, Dublin.
DUKES.—On the 10th inst., Selina, the wife of Dr. Wm. Profit Dukes, of Spitalfields, aged 33.
EAMES.—On the 9th inst., at Derry, Dr. Eames, aged 69.
HEUDE.—On the 11th inst., Wm. W. Heude, M.D., of Southfields, Leicester, aged 51.
JOHNSTON.—On the 8th inst., at Ratoath, Co. Meath, W. Stuart Johnston, L.R.C.S.I., late of Dunboyne, Co. Dublin.
SADLER.—On the 9th inst., at Friar's-gate, Warrington, Peter Leigh Sadler, Surgeon, aged 42.

Notes, Short Comments, and Answers to Correspondents.

THE CAPE DIGGINGS.

A Young Surgeon and Intending Emigrant and other correspondents ask for information about the diamond fields at the Cape. From private accounts that have reached us we gather that the statements as to the amount of disease prevailing among the diggers are exaggerated, although there has, no doubt, been some sickness, such as fever, and diarrhœa of a dysenteric character. A gentleman who was advised to proceed to the high lands of the Cape some years ago, on account of decided pulmonary disease, found himself immensely benefited by that climate. Having, as he thought, perfectly recovered his health, he became seized with the prevailing thirst for diamonds, and set off for the diamond fields. For some time his health continued excellent; but the places where the "finds" had been numerous soon came to resemble crowded towns, with the insanitary conditions of atmosphere, besides dust, that appertain thereto, and he again exhibited symptoms of the pulmonary affection from which he considered himself entirely recovered. By all accounts an emigrant ought either to have capital or the knowledge of some useful trade to start with. Those with capital may be pretty well off as regards most of the comforts and necessaries of life; but "digging" is very hard and, it is needless to add, very uncertain labour. We have little doubt that a young, energetic, and strong medical man, with some means at his disposal, might realise money at the fields by the exercise of his profession and business speculations; but we should hesitate before advising anyone to proceed to the diamond fields at the present time. The "finds" have not of late, by all accounts, been equal to what they were in quantity. Judging from what we have already said, another of our correspondents, who desires to proceed to the Cape on the score of his health being delicate, should think twice before proceeding to the scene of the "diggings." A work has just been published on "The Diamond Diggings of South Africa," by Charles A. Payton, which affords much useful information. It is published by Mr. Horace Cox, London.

Dr. Leslie's communication shall receive attention next week.

WHITE-LEAD POISONING AGAIN.

THE necessity for forcing proprietors of lead and similar works to observe due precaution against the absorption of poison by their *employés* was painfully exemplified at Newcastle the other day, when an inquest was held on a poor girl, aged sixteen, who died of lead poison after only seven months' occupation at the Ouseburn Works. There was no medical man in connexion with the works. So deleterious was the poison that it passed through the very soles of the *employés'* feet, and twisted their hands into unsightly contortions. The jury, in returning their verdict of "Died of lead-poisoning," administered a severe rebuke to the proprietor.

Fair Play.—We wish that we could see a remedy for the circumstances alluded to by our correspondent; but, in the present state of the law, we cannot.

THE HISTORY OF MIDWIFERY.

To the Editor of THE LANCET.

SIR,—Allow me a few words suggested by some remarks in Dr. Meadows' lecture in last week's LANCET.

Without questioning the benefit likely to arise from speculations on the obstetric position usual in pre-historic times, we may assume that little importance is attached to conclusions drawn from insufficient premisses. If Dr. Meadows will turn to the passage he quotes from Exodus, he will find the word "them" printed in italics, indicating that it does not exist in the original, but has been supplied by the translators in accordance with *their view* of the sense of the passage. Every student in Hebrew who has read the Pentateuch knows that the meaning of the words translated in the E.V. by "upon the stools" in the passage in Exod. i. 16, is very obscure and doubtful; and although some versions so translate it, the probability is that this rendering is incorrect. To enter upon a critical analysis of the word, and especially of the construction of the sentence, would be to a Hebrew scholar superfluous, and to others would appear useless and pedantic. The word in dispute literally means (neglecting the Masoretic pointing) "the stones," and is supposed by some to have this meaning here, and to refer to stone troughs, vessels, or cisterns to which parturient women betook themselves for purposes of ablution; and Parkhurst observes, referring to mention being made of obstetric seats or stools by physical writers, "I know not but there may; but surely they were hardly made of stone, as the word expresses." In Bagster's "Hebr. and Chald. Anal. Lex." it is stated: "It is doubtful what it refers to." Knobel has decided that the word refers to "the vagina"; and Keil thinks the term used by the Targumists favours this view, and he explains thus: "When the midwives were called in to assist at a birth, they were to look carefully at the vagina; and if," &c. My own opinion rather is that the word is an obsolete one, or an "hapax legomenon" for "the genitals," and that the plain and literal translation of the passage, according to strict grammatical rules, and giving due force to the "Vaw convers.," is this: "When ye deliver the Hebrew women, *then* ye shall look at the genitals; if it be a male, *then* ye shall put him to death; but," &c. This, like all the other and numerous explanations offered, is only conjectural, and perhaps the term may be a technical one in use at that time, and since forgotten.

This mixing up superficial biblical references with medical subjects reminds me of absurdities we meet with in some theological works, the writers of which try to show off their supposed medical knowledge. Thus in Bloomfield's Greek Test., vol. i., p. 49, second edition, the learned editor of "Thucydides" leaves his Greek for physiology, and, referring to the woman with issue of blood, speaks of the "os matricis" and "os sacrum" as two orifices. "It is not clear whether by this we are to understand a flux from the *os sacrum* or the *os matricis*. The former seems the more probable"!

I should think that the gentlemen attending the lecture must have felt some surprise at being asked to imagine the gossip of a West-end servants' hall.

Your obedient servant,
Corfe Castle, May, 1872. WILLIAM E. HUMBLE, M.D. Lond.

INDIAN MEDICAL SERVICE.

A CORRESPONDENT is desirous of ascertaining whether there will be a competitive examination for the above service, the date at which it will be held, and the probable number of vacancies?

Mr. Thos. S. Vance.—We think the case should have been the subject of an inquiry by the coroner. The surgeon in charge of one case could not well leave it for another.

Juvenis.—1. Hewitt.—2. Meadows.—3. Holmes; none since Franco-Prussian war.—4. Yes.

AMPUTATION OF LEG UNDER THE ADMINISTRATION OF NITROUS OXIDE.

To the Editor of THE LANCET.

SIR,—The sickness, headache, and loss of appetite which in many cases follow the administration of chloroform are, *quantum valeant*, unfavourable to recovery after great operations, and render us unwilling to use it for minor ones. Hence the constant endeavour to find an anæsthetic free from these disadvantages. Having used nitrous oxide in minor cases, such as amputation of fingers, fistula, avulsion of toe-nail, &c., with perfect satisfaction, I resolved to try it in the following case of amputation of the leg.

Daniel L——, aged forty-six, came under my notice for the after-effects of destructive inflammation of the ankle-joint. I found the joint quite disorganised, suppurating profusely, with extreme destruction of cartilage. The man, previously unhealthy, was very much emaciated; bed-sores were forming; the pain was constant and great, and all the signs of hectic were present. At his age and in such a condition any partial operation seemed hopeless, and I therefore decided to amputate. The gas produced insensibility so quickly, that a minute and a half from the commencement of inhalation sufficed for the removal of the limb. The inhaler was then taken away for a short time, but reapplied during the tying of the arteries and sewing up of the wound. The man passed through the operation without pain or any untoward symptom, and was, I think, left in a more favourable condition for recovery than had chloroform been administered. From the depressed condition of the patient, and the unhealthy state of the integuments of the leg, considerable sloughing of the stump occurred, rendering recovery slow; but he has now regained his strength, and says that he never felt better in his life.

Yours truly,
Hanley, Staffordshire, May, 1872. WM. HISLAM DAVIS.

SEAFORD CONVALESCENT HOSPITAL.

We believe this hospital is one of the veritable seniors of its class in England, although it has only just held its twelfth anniversary. This took place on the 8th inst., and the Secretary's report showed that during the year 501 had been treated, at a cost of £1736. We shall be glad to notice the detailed report of the cases admitted as opportunity offers.

An Enquirer.—Nothing has yet been definitely fixed (except possibly in the mind of Mr. Cardwell himself) regarding the two questions referred to us by our correspondent. As soon as anything has been determined upon by the War Office authorities, we shall promulgate it.

Mr. Clarke would have to pass the ordinary preliminary examinations.

MILITIA SURGEONS.

To the Editor of THE LANCET.

SIR,—I have no wish to continue, otherwise than defensively, a controversy with "A Militia Surgeon of *more* than twenty years' standing" as to whether he correctly so designates himself by a few days or weeks, or even a month or two, because I simply take his word for it. His commission, he says, bears date prior to 1852, by which, with the aid of an Army List, I am enabled to identify him as one of three (there are only three) militia surgeons whose commissions are anterior to that year, and date back (why, I am at a loss to explain) to 1846-47. I can assure him my little parenthetical question had its origin neither in false "premises" nor want of "common sense," but in the Army List, and the fact that the militia were resuscitated in 1852 (Act 15 & 16 Vict., 30th June). Your correspondent, however, does not attempt to reply to the gist of my letter which was called forth by his previous communication to you. I repeat, what I before affirmed, that the method of first appointment, and the whole constitution of the militia medical staff, requires radical change before it can fit in with Mr. Cardwell's comprehensive reorganisation schemes. I advocated compensation to those who would be affected by sudden changes, and insisted that there should be only one door of entrance in future to the medical staff of the army, whether regular or militia. We are told that the militia is to be made a *bond fide* second line of defence, and with such an end in to be fully associated—nay, incorporated—with the regular army in brigades. Its surgeons must, therefore, have some defined and intelligible relation to the medical officers of the regulars, or collision on matters of rank must ensue in camps, depôts, and manœuvres. For example, in a general field hospital would any of the numerous youthful and recently appointed surgeons of militia take precedence and give orders, if necessary, to the mass of ancient army assistant-surgeons of fourteen or fifteen years' service? This is a practical question that may be put to the test at any time during an autumn manœuvre. The regular medical officer who enters by competition, passes slowly to the higher grades by examination and selection, and who toils many years as a subordinate in order that he may have that same "high special training" which your correspondent sneers at as beneath discussion, values military rank and position too highly to quietly submit to the possibility of such supercession. This question must be settled authoritatively. The militia medical staff, moreover, must be in itself complete, available, and efficient, in order to form a reliable second medical line. Complete and always available—not like that of a certain militia battalion during last autumn manœuvres which was placed under a staff assistant-surgeon because its own medical officers were *non est!* Efficient, physically and professionally—but here I must pause, for your correspondent says that all "properly educated surgeons should be fit for any duties, civil or military." No doubt; but so much hinges on the words "properly educated" that in the regular army the authorities have, rightly or wrongly, for a good many years refused to take it for granted, and insist on its being proved by successive test examinations. Perhaps your correspondent considers all such examinations, Notley training, &c., a joke; the proof of the pudding is in the eating—let him try!

Yours truly,

May, 1872. X.

To the Editor of THE LANCET.

SIR,—For the information of the correspondent who signs himself "Militia" in your number of April 27th, I write to say that a memorial has been already signed by upwards of one hundred militia surgeons, of which the following is a copy, and of which it is strange that he does not seem to have heard, as it has been sent to every militia surgeon whose name appears in the Directory.

To the Right Hon. Edward Cardwell, Secretary for War.

The memorial of the undersigned medical officers of militia humbly sheweth,—

That memorialists understand that under the new Army Regulations certain vested interests of the medical officers of militia are to be entirely ignored and confiscated.

That those interests are, to those officers, of material importance, constituting, as they do in many instances, considerable portions of their means of livelihood, of which it is contrary to the usages of Parliament that any public servants should be deprived without a full equivalent being paid for them.

That the militia medical officers are fully equal in point of professional acquirement and social position to the medical officers of the line, and competent to undertake any duties that may be assigned to them, so that the service could not suffer by their being continued in their present appointments when practicable.

That where under the proposed arrangements it would not be practicable to so continue them, their pecuniary losses should be ascertained, and provision made for their compensation.

Memorialists, therefore, humbly solicit the attention of the Secretary for War to the above representations, in the hope that he will take their case into consideration. And your memorialists will ever pray.

To this there are upwards of one hundred names signed. It is not likely there will be more, as they have ceased coming to hand for the last few days. A hundred will, however, represent a considerable majority of those most interested—viz., those who have charge of the militia staffs and recruiting. These signatures can be sent to any committee of militia surgeons that would undertake to make use of them, and would be authorised to do so. It remains for the English militia surgeons residing within reach of London to form themselves into such a committee, and undertake the further proceedings that may be considered necessary.

Yours obediently,

April 27th, 1872. ARRETOS.

F.R.C.S.—The recent decision in the Exchequer Court, reported elsewhere, applies to Philadelphian degrees obtained *in absentiâ*, and without previous examination before a competent Board. The value of German degrees obtained after due examination at the respective Universities is just what it was before the case of Andrews was tried in the superior Court. They do not entitle the holder to registration, or enable him to recover charges, except in the case of those persons registered immediately after the passing of the Medical Act. But if obtained from a respectable University after a regular examination, a British practitioner is justified in using the appropriate title.

Mr. G. A. Russell.—In Cassell's Household Guide much useful instruction of the sort is given.

Dr. Sedgwick's letter arrived as we were going to press; but we have done what we could.

EXTERNAL TREATMENT OF SMALL-POX.

To the Editor of THE LANCET.

SIR,—In your impression of to-day, Mr. Morrill, believing in the elimination of variola, fears to check it by local applications. Let me assure him we have practical proof that his fears are groundless. But let me further ask him what evidence he has, or anyone besides himself ever had, of any elimination of disease? That a veritable poison germ is received, multiplied, and eliminated, may please for a theory, but is rather a coarse pathology. As the normal performance of the functions of the body (physiology) depends immediately upon the nervous system, so equally the abnormal performance of these functions (pathology) depends upon it, and all diseases are neuroses. The *vis vitalis* passing along healthy nerves influences a healthy nutrition. The force or the media being altered, nutrition is altered also. It is true that many morbid substances introduced into the system influence the nutrition of the body in a direction the same as that from which they derived their source, and that a class of symptoms ensue the same (subject to certain influences of the system itself) as that which occurred in the source itself. This, however, is not elimination. If I were to suggest to Mr. Morrill the illogical fact in variola, that the more profuse the eruption the more serious the disease, and, *ergo*, that the more abundant the elimination the greater the danger, he would probably reply that that body had out of a few germs developed so vast a mass of (germs) disease that the elimination must be abundant—a *petitio principii*. I am not suggesting any new idea to Mr. Morrill. A large number of thinking men in the profession prefer a vital to a chemical theory. According to the latter, the animal body is a manufactory where out of certain raw materials a morbid product is obtained, and forthwith thrown upon the market, or, in other words, eliminated. Mr. Morrill may or may not be right as regards actinism; but, anyhow, it is merely a suggestion that one force (light) may influence another force (vitality), and this no one denies. The influence of mercury on the body is analogous. A very small particle of calomel introduced into it stimulates all the secretions, influences the nutrition of the whole body, causing absorption, &c. &c. Does Mr. Morrill assert that a grain of calomel has multiplied or been divided into such an incalculable number of particles as to be eliminated by all these secretions, and to be present throughout the body? I am sure Mr. Morrill will have left the age of "humours" to our ancestors, and in the present age will prefer "force." If he believe in germs as vehicles of disease, I will agree with him in so far as I hold a germ to be merely a vehicle of force, whether normal or morbid. And I believe the force may exist *per se*. Otherwise how would Mr. Morrill account for the origin of disease?

Your obedient servant,

Hull, April 27th, 1872. HENRY CARNLEY.

THE ROYAL ORTHOPÆDIC HOSPITAL.

Messrs. Tamplin and Adams ask us to state that they did not vote at the Annual Court when the report of the Committee of Management was received.

Dr. Philip Foster, (Leeds.)—We regret that it is not in our power to specify the time; but our correspondent's request shall be borne in mind.

FEVER POISONS AND DRY EARTH.

To the Editor of THE LANCET.

SIR,—"However powerful the emanations from drains &c. may be, they cannot generate typhoid unless the dejections in the drains be charged with matters originating from typhoid patients." (THE LANCET, Jan. 13th, 1872, Sir Thos. Watson and Dr. Roberts.) "And the germ will grow on a dunghill or in a cesspool, wherever there is a favourable nidus, like fungi." (*Idem*, Mr. Buée.) Stinks therefore, like snakes, are not, on first perception, distinguishable as venomous or non-venomous. They may be the vehicle of death, and, to "mak sicker" in the one case as in the other, we seek to destroy them. But the poison survives, though man's own indiscretion or proclivity may be a condition precedent to his suffering from it. "Organic and inodorous" in its nature, the vitality of the germ must be annihilated; the means receiving favourable mention being chloride of lime, carbolic acid, and sulphate of iron, and their very constant use in all closets, sinks, and drains. A compound remedy is, however, a practical inconvenience, and no single one has been found to be an antidote to every bane. Can there possibly exist such a thing, a natural and simple adaptation to impunity? Certain dry earths are declared to be perfect deodorisers. (I introduced a box of garden mould with advantage for the use of the cats in a friend's house, where I was staying many years ago in India.) Are these dry earths admitted to be perfect disinfectants too, never allowing the germ to get again into the atmosphere alive? The attainment of this object by the patent earth system would rank the discoverer, Mr. Moule, amongst the well deserving of his country, and the utility of the system for sanitary purposes should claim the action of Parliament to make the use of it compulsory. But has experiment or observation made experience of the fact that the application of earth to the dejections of typhoid and cholera patients is destructive to the poison as it is to the smell and matter of the stools? In the compost there is a favourable nidus for the germ if it remains endued with vitality, and the question then becomes one of legislative prohibition, not compulsion, in the adoption of the earth for the water system. The apprehended advent of the cholera gives everyone an interest in the subject, and will perhaps be accepted as excuse for this letter.

Your most obedient servant,

London, April 29th, 1872. G. B.

Staff Assist.-Surgeon W. (Nusserabad) will accept our thanks for his interesting communication regarding the methods of performing the operation of, and the instruments used in, circumcision by the Arabs at Zanzibar, and on the East Coast of Africa, Arabia, and Bombay. We fear, however, that his description would be scarcely intelligible without the aid of woodcuts, which could not be made with an assurance of their correctness from the rough sketches he has kindly forwarded.

M. B.—It is published by Messrs. J. and A. Churchill, and can be procured through any bookseller.

G. B. P., (Kinsale.)—We confess that we are unable to understand why an army surgeon should not, under the circumstances, be entitled to the usual fees. Our correspondent, however, had better consult some solicitor before proceeding further in the matter.

Mr. James Donald, (Forfarshire.)—We can only suggest that our correspondent should seek the advice of some respectable practitioner in his own neighbourhood.

REMARKABLE CASE OF ESCAPE FROM FRACTURE BY DIRECT VIOLENCE.

To the Editor of THE LANCET.

SIR,—I think the following case deserves being noted, being an instance of how, under certain circumstances, an enormous weight may pass over a limb without causing a fracture.

On the 4th of May, 1872, I was called upon to see a young lady, aged ten, who, while running across the road, had been knocked down and run over by a cart laden with a ton of coals. Upon examination a few minutes after the accident, I found her suffering from the shock, a contused wound of forehead, caused by falling upon a sharp stone, and a *contusion* of the left leg. Now the carter honestly stated that he saw the *wheel pass over her leg below the knee* as she lay on her face, and two ladies who were walking alongside corroborated the same fact. The stocking of the child also bore unmistakable evidence of the track of the wheel by having a muddy mark, with well defined straight edges, having the same diameter as the rim of the wheel. Hearing the history of the accident, and seeing the mark of direct violence, I was greatly surprised by finding both bones of the leg free from fracture, nothing being apparent but swelling and ecchymosis of that part of the limb corresponding to the mark of the wheel. Upon examining the place where the child fell, a small mound of street-sweeping was found, which probably tripped her up. The most likely theory which presented itself to my mind was that the limb was supported on its anterior aspect by the soft convex mass of sweeping, and that the fleshy belly of the gastrocnemius acted as a pad behind, and in this way saved the bone from the otherwise crushing effect of twenty-seven cwt. I may add that, even on the third day after the accident, nearly all pain and swelling have subsided under the use of spirit lotion, rest, &c.: a result particularly happy when we consider that in a slightly altered position the limb would have sustained a compound fracture demanding amputation.

I remain, Sir, yours, &c.,
BENJAMIN H. SPEDDING,
Belfast, May 7th, 1872. Medical Attendant to the Belfast Dispensary.

DIPLOMA TRAFFIC IN THE UNITED STATES.

THE following letter has been sent to Mr. Horace Greeley, and that gentleman has wisely published it for the benefit of all who may be disposed to buy or sell diplomas. Evidently no candidate for "licens to practis" need be discouraged, though he may not be "a Licend Phisian" like the author of the following letter:—

"Cedear Town Ga Aprel 20th, 18,72.

"Mr. H. Greeley.—Dear sir: I witch you to do a Litle work for me I want 30 coppeys of Licens to practis medicin just Blank coppys and I will fill them out my Self make them out from any coledge in that citty I am a Licend Phisian, and have to pay the Bord five Dollars Every year for them and I want them cheepper, if you will get me a blank Diploma I will pay you for your trouble and take it as a favour if you send me the Diploma you need Let Send me the Licens if you cant do that Send me the Licens Send me them as soon as you can and the Bill and I will Send you the money as you direct it I witch you to send me your weekly paper, if you will Send me the Diploma I will send you Ten Names for your Paper or pay you Ten Dollars in money Let me hear from you soon. Direct to Cedear Town Polk County ga. "Dr, J, D, T."

Mr. James Meyers.—1. Fees cannot be recovered for professional services by an unduly qualified practitioner.—2. American diplomas do not enable their holder to recover fees.—3. Certainly not.—4. So far from breaking the law, the law provides that he may recover the costs of medical and surgical appliances.

A Country Practitioner must perceive, if he regularly reads his LANCET, that the subject has not escaped our notice.

HOSPITALS AND THE WORKING CLASSES: THE POWER OF THE PENCE.

To the Editor of THE LANCET.

SIR,—I think it worth while to inform you that the working men of this town and neighbourhood have subscribed £465 11s. 11d. to the Chesterfield and North Derbyshire Hospital for the year ending 31st March last, and for the important improvements and extensive additions to the building, now in progress, they are expected to subscribe at least £1000. "Hospital Sunday," being the second year of its operation, produced £160 10s. After paying the expenses of the year, there is a balance of £193 9s. 1d., and this has been transferred to the endowment account, which now amounts to £5618.

There are many institutions of a similar kind, and in larger towns, in a very different financial position, and *one* reason is that the working men do not systematically add their pence to the silver and gold of the rich. This brief note may, therefore, give a hint to all interested in the management of hospitals, which, unknown in ancient Greece and Rome, are at once the glory and boast of our country, and the best practical evidence of the benevolent spirit of our common Christianity.

I am, Sir, yours faithfully,
Chesterfield, May 6th, 1872. [JOHN ROSE, M.D.

A Parish Doctor may find his duties laid down in Glenn's Laws affecting Medical Men, page 162 *et seq.*—2. Paupers have a right to medical attendance in the place where they reside, no matter where they came from.—3. The relieving officer is not bound to see the applicant before granting an order in all cases. In Liverpool this is the practice. He must visit the case as soon after as possible.—4. He should be reported for frequently writing "immediate" in chronic cases.

MRS. DAY FUND.

THE subscriptions already promised to the Mrs. Day Fund amount to £300. Subscriptions may be sent to Dr. Richardson, 13, Hinde-street, W.; Dr. Paul, Camberwell House, S.E.; and Dr. Sedgwick, 2, Gloucester-terrace, Hyde-park.

M. P.—We cannot recommend anyone by name. Let our correspondent consult any respectable surgeon.

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—In order to show the manner in which signatures are obtained to the numerous petitions to the House of Commons in favour of the repeal of the Contagious Diseases Acts, I consider it my duty to send you the following statement.

This evening my wife brought to me two papers with printed headings in very small type, merely stating that the "Contagious Diseases Acts" should be repealed, and requesting signatures. These papers were presented to her by a woman sometimes employed as a charwoman, and she presented the compliments of a lady residing on Clapham-common, asking her to sign a petition in favour of *women having votes for members of Parliament*. These were the precise words employed, as I myself questioned the woman, who was accompanied by a domestic servant of the lady in question. I explained to them the real purport of the petition, when they both appeared much disgusted, and said they would have nothing more to do with the matter. The domestic told me that her mistress was in the habit of taking out these papers whenever she went for a walk, and usually obtained a number of signatures. I sent a message to the mistress, recommending her to desist from such proceedings, as obtaining signatures ostensibly for one object, when the signatures were to be appended to a petition in favour of another (and to myself, with very many others, much less desirable one), was clearly something very like contempt of Parliament, and, if I mistake not, a punishable offence. I am, Sir, yours very obediently,
May 3rd, 1872. W. H. K.

Mr. Samuel Craddock.—We think our answer of last week sufficiently included the points of the question. The further question put by our correspondent is one that can be answered by the staff better than by us; but unless there is unprofessional conduct or defect of service, we should answer the question in the negative.

Mr. M. Reardon.—The book mentioned is fairly instructive, but not very popular.

SWALLOWING FALSE TEETH.

To the Editor of THE LANCET.

SIR,—On perusing the case of a gentleman who had during the night swallowed his false teeth and plate, I was certainly very much surprised at the heroic treatment observed in this instance, no well as several others I have read of before—e. g., the butcher who was mentioned some months ago, in whose case the treatment amounted to nothing less than gross barbarity, from which our forefathers would have shrunk with horror. A simple treatment might have availed at a shorter period without risking the life of the patient for ten days, and putting him to so much unnecessary suffering.

A similar case happened to a patient of mine. A young woman rushed into my surgery one night in a high state of excitement, saying she had swallowed four of her front teeth, plate, hooks, and all. I told her to sit down and calm herself, and having tried with the probang to find the situation, I ascertained it was lodged midway in the œsophagus. I made her take a powerful emetic of sulphate of zinc, and added plenty of warm water, and in about fifteen minutes afterwards she vomited, and we were both much relieved by hearing the click of the plate and teeth in the basin. The power of the emetic relaxed the spasm in the œsophagus, and thus sent forth the foreign body, which could not have been pushed down without fearfully lacerating the parts and endangering life.

I am, Sir, yours obediently,
Bridgwater, April 30th, 1872. ORLANDO HAVILAND, M.R.C.S.E.

Member of a Health Committee.—According to our experience the Rochdale system is the most effective mode of utilising night-soil and ashes. Street sweepings vary so greatly in value that it is difficult to give any definite directions.

Foreigner.—1. Marchison.—2. The article on the subject in Reynolds's System of Medicine.—3. Walshe.—4. Lawson.—5. Allen.

INQUESTS ON PATIENTS AT VILLAGE HOSPITALS.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, Dr. Tyte, concerning the payment of fees to medical men for attending inquests on patients dying in village hospitals, I will state what the coroner for this district said to me in a similar case.

I was summoned to attend the inquest on a man who died in the Cottage Hospital in this neighbourhood, and gave evidence. The coroner then asked me how the hospital was supported, whether endowed or kept up solely by voluntary contributions, or in what way. I answered him "by voluntary contributions chiefly, but that the patients themselves paid a small sum weekly according to their means." He then allowed me my fee, stating that the fact of the patients themselves contributing made it more or less self-supporting, and that he was thereby enabled to pay the fees to medical men. Had it been otherwise, the law would not have sanctioned his doing so. Yours obediently,
Surbiton Surrey, May 14th, 1872. OWEN COLEMAN, M.D.

A Provincial House-Surgeon would have been entitled to a fee for attendance at the Police Court if the prisoner had been committed for trial; but he can still obtain remuneration by applying to the Home Secretary. In the case of a patient dying in a hospital, the house-surgeon must make a post-mortem and give evidence before the coroner without a fee, but is entitled to a fee if the patient was brought in dead. Consult Heath's Manual for House-Surgeons.

Mr. Jessop, (Leeds.)—Thanks. We shall be happy to receive the communication.

NURSES AND MEDICAL MEN.

To the Editor of THE LANCET.

SIR,—Permit me to bear my testimony to the state of the facts on this question as far as English convents are concerned. I was for some years medical attendant to a Franciscan convent, and was frequently consulted by the nuns. They were examined and treated like other patients, except when uterine maladies were concerned, and then they suffered in silence, or with such relief as could be given by medicines, after a diagnosis founded on questions and general symptoms only. I especially remember one case in which a phthisical nun suffered terribly from obstructive dysmenorrhœa, and another in which frequently recurring hæmorrhage was probably due to an uterine polypus. In neither was any vaginal examination permitted, nor any surgical treatment even regarded as a possibility, in spite of all the representations I could make, and although, I believe, I possessed the full confidence of the patients and of the superior. Whether a female surgeon would have been allowed to examine and operate I cannot say.

I am, Sir, yours, &c.,

May, 1872. F.R.C.S.

Mr. C. H. Roberts.—The behaviour was irregular; but the circumstances were very urgent, and the officer may have acted from kindly motives.

Mr. Furley's paper shall appear in our next.

HOSPITAL ACCOMMODATION FOR WOMEN OF MODERATE MEANS.

To the Editor of THE LANCET.

SIR,—If the circumstances of the patient referred to in "Y. Z.'s" letter, which appeared in last week's LANCET, will not permit her to command in her own house the medical skill and attention she requires, her case would probably be deemed eligible for admission to the new wing of the Hospital for Women, Soho-square. If your correspondent will kindly send me his name, &c., I shall be happy to forward the necessary papers.

Your obedient servant,

HENRY B. INGRAM, Secretary.

Board-room, Soho-square, May 15th, 1872.

ERRATUM.—In the letter of Mr. Moses on the Local Treatment of Small-pox, published in our last issue, page 671, the strength of the solution of nitrate of silver should have been stated as *ten* grains to the ounce, and not *one* grain to the ounce.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Gairdner; Mr. Maunder; Dr. Sedgwick; Dr. Eben. Watson, Glasgow; Dr. Chambers; Dr. Stevens, Glasgow; Dr. Le Fevre, Amiens; Dr. Pettigrew; Dr. Taylor, Penrith; Dr. Ritchie; Dr. Wyllie; Dr. Grieve; Mr. Farrow, Chepstow; Mr. Maclehose; Mr. James, Enfield; Mr. Griffith, Wrexham; Mr. Castle, Farnham; Dr. Kitchener, Chippenham; Mr. Fletcher, Waltham; Mr. J. Wharton, Carlisle; Dr. Harris, Redruth; Mr. Roberts, Llanfairfechan; Mr. Bland; Dr. Rattray, Portobello; Mr. Smith, Clare; Mr. Rearden, Cork; Dr. Mackintosh, Downham Market; Dr. Dale, Plymouth; Mr. Clay, Birmingham; Mr. Robertson, Melbourne; Mr. Craddock, Shepton Mallet; Dr. Gascoigne, Brockville, Ontario; Mr. Sharman, Charleston; Dr. Jack, Hampton Court; Dr. Woodward, Worcester; Mr. Atkins; Mr. T. Morton, Keswick; Dr. Campbell, Brentwood; Mr. Hemming; Mons. Ch. Torchon; Messrs. Brown, Douglas; Dr. Humble, Corfe Castle; Mr. Powell, Brighton; Dr. Phillips; Mr. Gregg, Malmesbury; Mr. Brett; Mr. J. Donald, Kirriemuir; Mr. Greaves; Mr. Breach, Yattendon; Mr. Buck; Mr. F. Strange; Dr. Lindsay, Mickleover; Mr. Norris; Mr. Castell; Mr. Davies, Milgrove; Mr. O'Conor, Enniscorthy; Dr. Hayward; Mr. Orpin; Mr. Harris, Dublin; Mr. Martin, Bangor; Mr. Elliott, Preston; Mr. Jessop, Leeds; Mr. Furley, Edinburgh; Mr. M'Iver, Brussels; Mr. Kemp, Wigan; Mr. Rivington; Dr. Moore, Dublin; Mr. Jones, Weston-super-Mare; Mr. Morgan, Pontypridd; Mr. Clarke; Mr. Eldon; Mr. Kempthorne; Dr. Hallingsworth, Malta; Mr. J. P. Smith, Birmingham; Mr. Bates, Leigh; Mr. Johnstone; Mr. Rimell; Mr. Wheeler; Mr. Richards, Salisbury; Dr. Alexander, Westbury; Dr. De la Motte; Mr. Atkinson; Mr. Ingram; Mr. E. Cooper, Bristol; Mr. Berryman, St. Austell; Dr. Symes, Leeds; Dr. Coleman, Surbiton; Messrs. G. Masson, Paris; Mr. J. Smith; Dr. Platt; Mr. Blyth, Huntingdon; Mr. T. Kennion, Birkenhead; Dr. Grant; Mr. Robinson, Bournemouth; Mr. Wolkman, Wellington; Mr. Hargreaves, Carshalton; Dr. Magrath; Mr. Parkinson, Edgbaston; Dr. Crace Calvert, Manchester; Mr. Lees; Mr. Moses, Wolverhampton; Mr. Hamilton; Mr. Shepherd; Mr. Robson, Dorking; Mr. Bevan; Dr. Leslie; Mr. Oldfield, Wellington; Mr. Collins, Peterhead; Mr. Woodfield, Keswick; Mr. Morson; Dr. Corfield; The President of the London Institution; Galen; X.; A Parish Doctor; Pathos; F.R.C.S.; A Ratepayer; H. H.; Juvenis; Foreigner; Xenophon; Member of a Health Committee; Fair Play; Medicus; A Medical Officer; W. H. P.; A Subscriber; G. P.; A Stickler for Professional Honour; The Dean of the University of Philadelphia; M. F.; &c. &c.

Wiltshire Independent, Downpatrick Recorder, Worcestershire Advertiser, Bruxelles Journal de Médecine, Oswestry Advertiser, Glasgow Herald, Mansfield Advertiser, Essex Gazette, Kendal Mercury, Dundee Advertiser, Allgemine Medizinische Zeitung, Brighton Guardian, Parochial Critic, Liverpool Daily Post, Edinburgh Daily Review, and *Birmingham Morning News* have been received.

Medical Diary of the Week.

Monday, May 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, May 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Edward B. Tyler, "On the Development of Belief and Custom amongst the Lower Races of Mankind."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—Microscopical Specimens in illustration of Dr. Burdon-Sanderson's recent Demonstrations on Pyæmia; Tubercle in a Fowl; Pelvis and Genital Organs of an Adult Hermaphrodite; Tumours of the Scalp; Melanosis of the Penis; Lymphoid Cancer of the Small Intestine; the parts after Operation for Cancer of the Penis; a Cyst; Sequestrum from the Tibia; Disease of the Cerebellum; Intussusception in an Infant; Enlargement of Clitoris and Labia Minora; Multiple Exostosis; Ossified Aneurism of the Left Ventricle of the Heart; Cardiac Disease with Embolism of the Middle Cerebral Artery; Cancer of the Larynx with Enlargement of the Thyroid Body; Malignant Disease of the Eyeball, Brain, and Cranium; Exostosis removed from the Head of the Tibia; the two Legs of a Club-footed Child, showing good union of the Posterior Tibial Tendons; an Intra-cranial Tumour; Hydatid Cyst between Diaphragm and Liver; Myxoma of Breast; &c. &c.

Wednesday, May 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, May 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat and Light."

Friday, May 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. (Last Meeting). — Dr. Broadbent: "Left Hemiplegia, with Convulsions and Coma." — Dr. Andrew, "On a Case of unusual Daily Range of Temperature, associated with Vegetations on Mitral Valve and Infarctus of Spleen." — Mr. Cooper Forster, "On a Case of Irritable Bladder in a Child."—Mr. T. Smith, "On a Case of Gastrotomy."—Dr. MacCormac, "On a Case of Gastrotomy."
ROYAL INSTITUTION. — 9 P.M. Prof. Clifford, "On Babbage's Calculating Machines."

Saturday, May 25.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION. — 3 P.M. Prof. Roscoe, "On the Chemical Action of Light."

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